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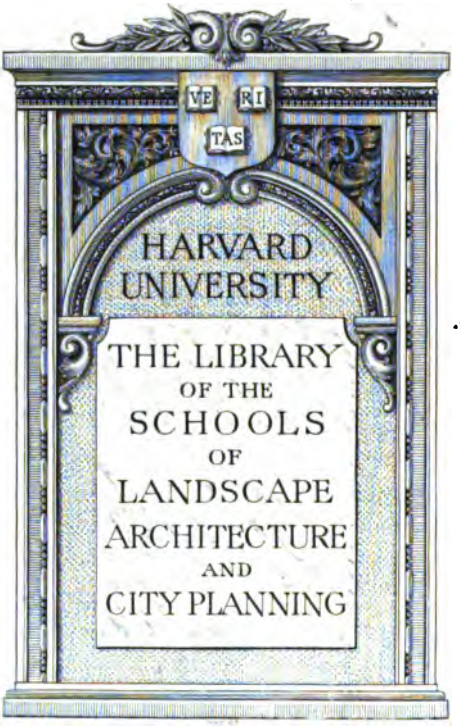
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# MUNICIPAL GOVERNMENT IN CONTINENTAL EUROPE

# MUNICIPAL GOVERNMENT IN CONTINENTAL EUROPE

BY

ALBERT SHAW

AUTHOR OF
"MUNICIPAL GOVERNMENT IN GREAT BRITAIN"

NEW YORK
THE CENTURY CO.
1897

June 17 1933
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## PREFACE

THE many readers who have given a cordial welcome to the volume on "Municipal Government in Great Britain,"—which appeared in January of this year, and is about to enter a third edition,—will need no prefatory explanation of the author's method and point of view in this companion volume. To others it may be well to explain that although each of the two volumes is complete in itself, the earlier book is in some sense introductory to the present one; while both together are intended to serve as a general sketch of the history, forms, methods, motives, and results of municipal administration in those countries of Europe which have dealt most successfully and instructively with the new problems arising out of the conditions of life in cities. The rapid expansion of the great towns is, perhaps, the most striking social phenomenon of the last quarter of this eventful nineteenth century. The term Municipal Government, in the United States, is suggestive of attempts to emancipate our great towns from the control of corrupt and inefficient men, to the end that the revenues may

be honestly collected and expended and public work properly performed, and that the police power may be purified from its taint of alliance with injustice and crime. But in Europe the honesty and the general efficiency of municipal government are not seriously in question anywhere. Municipal government, from Scotland to Hungary, is exalting the bacteriologist and the sanitary inspector, fostering the kindergarten and the technical school, and inquiring anxiously about the housing of the people. I have tried to explain intelligibly the structure and working of the municipal machinery, but I have considered it a no less essential part of my task to describe the transformation of street-systems, and the measures by which death-rates have been reduced.

To some critics it may appear that I have ascribed undue importance to Paris as a type and an influence; yet I can hardly think that any reader will fail to agree that Paris is the necessary starting-point for a description of the modern régime in Continental cities. In the preceding volume I found it advantageous to select Glasgow for the more rounded and elaborate study of British municipal life in the concrete. In my own inquiries and observations as an American visitor, I had discovered that to know well the ways and works of the Glasgow municipality was to possess standards of comparison and points of view which afforded the best possible equipment for the further examination of municipal methods and achievements, whether in Edinburgh and Dundee, in Belfast and Dublin, or in Manchester, Birmingham,

and Liverpool. But if Glasgow is the convenient threshold to a comparative knowledge of British municipal affairs, Paris in a far more essential way holds the key to an intelligent survey of municipal progress on the Continent. Whether one goes to the Low Countries and Scandinavia, to Switzerland and Italy, or to Germany and Austria-Hungary, he finds evidences on all hands of the abounding influence that the modern Paris has exerted upon the outward forms of European cities. And some study of the history and characteristics of administration will soon make plain to him the remarkable influence that the symmetrical statutory schemes of France have exerted upon the law-making bodies of other countries.

Thus in giving so large a space to Paris and the French system,— as well, let me add, as in the different method employed for the description of German city government,— there is nothing accidental either in the proportions or in the arrangement of the present volume. In various courses of lectures upon the administration of cities, in the Johns Hopkins University and elsewhere, I have sometimes adopted the plan of choosing a different typical city for discussion in each lecture, and at other times have arranged a series of topics, illustrating each topic by citations from the experience of numerous cities. Each method has its advantages; and while the first is for many reasons best suited to the purposes of this book, I have found it feasible in considerable measure to combine the two. I have not attempted to supply a

cyclopedia of municipal information, and doubtless many things will be found lacking that would to one reader or another seem very important. Thus I have not discussed the local control of the liquor traffic,—except for allusions to the new Hamburg policy which compels beer-sellers to wash their utensils and scour their mugs! But largely as the liquor question enters into municipal discussion in the United States, it is in Europe for the most part a national or general rather than a municipal issue. I have omitted it, therefore, not because I failed to appreciate its importance, but rather because it is too distinct a question of the larger public policy for incidental treatment in a volume on European municipal government.

If this volume had been meant to give an exhaustive rather than a representative account of municipal arrangements in Europe, several additional chapters should have been added. The Scandinavian capitals possess much that is interesting and praiseworthy in their social institutions; and their progress in educational and sanitary methods, as well as in public works and general aggrandizement, is certainly worthy to be noted. Copenhagen had grown from 155,000 inhabitants in 1860 to about 350,000 in 1895, or 400,000 if the immediate suburbs are included. Its recent improvement in health conditions meanwhile is shown by a steady decline of the death-rate, which from a much higher average in an earlier period had fallen to 24 per 1000 of population in 1884, and to 18.7 in 1894. The city of Stockholm in

the thirty years from 1865 to 1895 had almost exactly doubled in population, having increased from about 130,000 to more than 260,000. Christiania meanwhile had grown at an amazing rate. In 1865 it was a town of 57,000 people, and in 1895 it had about 171,000 — precisely three times as many as thirty years before. Stockholm's death-rate was 28.7 in 1877, 24.6 in 1884, and only 18.3 in 1894. Christiania's in 1894 was 18.8. The methods of municipal administration in the Scandinavian countries resemble in some respects those of Germany, and in other regards show the effects of French influence, while embodying various features peculiar to themselves. But apart from the three capitals, the life of the Scandinavian peoples is chiefly rural.

The Swiss towns far more distinctly than the Scandinavian reveal the twofold influence of France and Germany. Each Swiss canton has its own system of municipal and communal organization. The French-speaking cantons incline more strongly toward the methods that prevail in the provincial districts of France; while the towns of the German-speaking cantons — though not organized upon the Prussian model — show more of the German spirit and scope of action. I had hoped to include in this volume a brief chapter on recent Swiss experiments, with the view of presenting some account of proportional representation, the referendum, and other innovations as adopted in Switzerland. But while proportional representation has been gaining ground rapidly since 1890, its application to the choice of municipal coun-

cils has been too recent to afford much instruction to other countries. Geneva, Bern, and Neuchâtel are among the towns that have entered upon this constitutional reform, and in due time Switzerland's experience will be of great value to our American communities, some of which recognize the theoretical justice and advantage of minority representation without having found any simple and practicable *modus operandi*. The Swiss are by no means sure that they have as yet discovered a method that they can widely commend. Switzerland contains none of the huge hives of town-dwellers that are found in the larger European countries; but its town government is, nevertheless, in many ways worthy to be studied, and in some to be imitated. In all cantons, German, French, and Italian alike, the general town council forms the central fact in the municipal government.

The phenomenon of rapid city growth is, to be sure, observable in Russia as elsewhere in Europe, especially since 1880. The story of the creation of St. Petersburg as a new capital and metropolis deserves a place, undoubtedly, in the annals of modern city-making. But the Russian empire for my present purposes can scarcely be regarded as a part of Europe. Local representative government has to a limited extent had a place in the conduct of the affairs of the great Russian towns, but of late the representatives of the house-owners have lost most of the municipal authority they formerly possessed, a law of 1894 greatly increasing the arbitrary power of the governors named by the emperor to rule over the cities.

Nor would much benefit be derived from a survey of municipal institutions in Southeastern Europe beyond the capital of Hungary. French engineers have laid out the new Athens, the new Bucharest, the new Belgrade and the new Sofia; and administrative systems in the states of the Balkan peninsula show a conspicuous tendency to borrow from the French codes. I have witnessed few sights more memorable than the Bulgarian capital afforded when undergoing the process of transformation from a squalid Turkish farming village to a pretentious European town. In 1880 Sofia was a ragged settlement of cow-keepers, with a dismantled old church and a forlorn mosque or two. In the present year, 1895, Sofia can boast a population of at least fifty thousand, with all the modern municipal appointments, including boulevards and electric lights, and not excluding the accompaniment of a good-sized municipal debt. Belgrade, the Servian capital, has also grown rapidly since the treaty of Berlin, while from the Acropolis of Athens the visitor looks forth upon a town almost as new and regular as a West Superior or a Seattle. These marks of town development in southeastern Europe may be full of novelty and interest, but they are superficial as yet, and have little or nothing to teach us. The ordering of municipal affairs in a German or Dutch or Swiss town on the other hand bears close inspection and gives many evidences of a true and admirable social progress.

In the preparation of this volume I have found it convenient to include parts of four articles contrib-

uted by me to the "Century Magazine"; but they have been fused with a much larger amount of new material in such a manner as quite to have lost their identity. The Hamburg chapter has been expanded and rewritten from an article which I contributed last year to the "Atlantic Monthly" (Hamburg's New Sanitary Impulse, "Atlantic Monthly" for June, 1894), and which I am kindly permitted to reprint. A portion of the third chapter has also been borrowed from an article of mine entitled "Belgium and the Belgians," which appeared in the "Atlantic Monthly" in 1890. To so many sources am I indebted for information or for assistance, all the way from Paris to Budapest, that I may not venture to publish the names of those who have aided me. I can only regret that circumstances have not permitted me to avail myself more largely of their knowledge and advice.

New York, October, 1895.

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# MUNICIPAL GOVERNMENT IN CONTINENTAL EUROPE

# MUNICIPAL GOVERNMENT
IN
# CONTINENTAL EUROPE

## CHAPTER I

## PARIS: THE TYPICAL MODERN CITY

THE distinctively modern city had its birth in the French Revolution, and Paris has ever since then stood as its preëminent type. To French influence several European countries owe the administrative framework of their municipal governments, while every European capital has been more or less completely made over in its external forms upon Parisian models. The recent history of municipal progress in continental Europe comprises much more, it is true, than an account of the triumphant advance from country to country, and from capital to capital, of the transforming and modernizing influence of the new Paris: yet no other impulse has been so strong, no other spirit so dominant. It would be impossible to present any complete reason why Brussels, Berlin, St. Petersburg, Dresden, Vienna, Budapest, or even Rome itself, is to-day what it is, without bringing Paris into the account.

Relation of Paris to municipal progress.

And thus a volume which would attempt to describe the methods and achievements of modern municipal

CHAP. I. government in the different countries and principal cities of Europe must of necessity begin with Paris, for reasons of both logical and historical sequence. London and the great British towns, as I have shown in a preceding volume, have attained their present municipal forms and institutions through a process of development peculiarly their own. It would be easy to show that they too have yielded in various ways to the influence of the French capital; but continental ideas and achievements have been an indirect and unperceived rather than a vital and obvious impetus to the tasks of town improvement and municipal reform in the British Islands. If the Germans have forgotten, it is none the less true that Paris has been a prime influence in the renaissance not only of Berlin, but also of Hamburg, Frankfort, Stuttgart, Munich, and Dresden. Berlin and Vienna have accomplished magnificent results in modern city-making, and in the past decade or two they and perhaps other continental cities outside of France have adopted municipal appointments in some respects more scientific and effective than those of Paris. But Paris was the pioneer, and it has not yet lost its place as the foremost type of the thoroughly modernized city. French public authorities, architects, and civil engineers were the first to conceive effectually the ideas of symmetry and spaciousness, of order and convenience, of wholesomeness and cleanliness, in urban arrangements.

British townsless indebted than continental to French ideas.

Parisian impress upon German cities.

Those ideas, as embodied in the Paris of the nineteenth century, have made their way even to Constantinople, and have begun the conquest of the Oriental cities. The medieval European town was a labyrinthine tangle of narrow, dark, and foul passageways and alleys. Its frightful congestion was due in most cases to the military cincture of wall, moat, and glacis

Congestion of the medieval town.

that yielded nothing to the growth of population. The modern spirit has thrown the walls into the moats to make boulevards and open spaces, has laid down broad and systematic thoroughfares upon the obsolete tangle of haphazard passages, has provided illumination, water-supply, and drainage, and has in short created those appointments and conveniences that distinguish the well-ordered city of our day from the old-time cities that had grown up formless and organless by centuries of accretion. In this brilliant nineteenth-century task of reconstructing cities in their physical characters, dealing with them as organic entities, and endeavoring to give such form to the visible body as should best accommodate the expanding life within, Paris has been the unrivaled leader.

Modern urban expansion as inaugurated by Paris.

There has been some disposition, however slight, among English-speaking people to undervalue French civilization and to minimize the importance of French services to the world at large. The attainments of German scholarship in many directions are so colossal; the recent German applications of recondite scientific inquiry to the protection of the public health, and in various ways to the practical arts of life, have been so remarkable; and German energy and prestige are now so dominant, that in our admiration for the achievements of this younger people we are in danger, perhaps, of according less than her full due to France. It is something to remember that all countries are under permanent obligations to the clear political philosophy that furnished the French Revolution with its principles, while most countries are not less indebted to modern France for lessons in the science and art of public administration. Nor is it a trifling debt we owe to the refined and artistic tastes of the French people for a host of the amenities and comforts of our modern life.

French versus German contributions to social progress.

CHAP. I.

City life and the national welfare.

When the French began to teach the new art of building cities, men were far from a realization of the fact that the twentieth century was destined to dawn upon a group of nations that had adopted city life for the majority of their people; nor did men perceive that the mere difference bet veen good and bad municipal arrangements would signify either the conservation of the race in bodily vigor and in the education of mind and hand, or else its rapid physical and mental deterioration. It meant less for the nation at large that in towns like the Paris of the eighteenth century the death-rate was always higher than the birth-rate, for the reason that the urban population was in those times small in comparison with the rural. But if such a condition were prevalent in our day, the consequences would be too dreadful to contemplate. Yet it is true that without urban improvements of the kind that the French people first instituted, the yearly number of deaths would now considerably exceed the yearly number of births in all large centers of population.

A century of Parisian transformations.

It is marvelous to note the ceaseless operations of the transforming energy derived from the Revolution. Rather inconspicuously placed in a hallway of one of the buildings in which the municipal authorities of the capital made their extraordinary display at the Exposition of 1889, was a map that had a fascinating interest. It was a street map of Paris, showing by different colors the periods in which the great boulevards, avenues, squares, and other visible improvements had been constructed. No change in the higher government had seemed to check the mighty impulse. Everything that lay in the way of the broad, straight swath of a new avenue was razed unmercifully, and the street system of the old inner metropolis was made to conform to the systems of the splendid new quarters

that were springing into existence, especially toward the west.

In the days of the Revolution the site of the present Place de la Concorde, where the guillotine was then so active, was upon the very western outskirts of Paris, while the prison of the Bastille — whose destruction in July, 1789, opened most significantly that long course of wholesale Parisian demolition, in order that freedom, science, and sunlight might replace the oppression, ignorance, and gloom of the old régime — was then on the eastern limits, and beyond it lay the open country. North of the inner line of boulevards, which had been already laid out, there was practically no Paris; and south of the Hôtel des Invalides and the Luxembourg, beyond which the vast city now stretches so far, there were in those days fields and a farming population.

The boundaries of 1789.

It should not be inferred, however, that these new parts have since arisen upon a ground-plan wisely provided in advance. To some extent, it is true, such has been the case, and in the newest quarters of Paris — for instance, in Passy, Neuilly, and other suburbs beyond the gates on the west — the magnificent avenues have been laid down upon the open fields, and the exercise of forethought will have saved all the cost and trouble of subsequent reconstruction. But even in Paris, since the Revolution, there has been some of the improvidence that prevails elsewhere; and while the inevitable municipal plow has been cutting its stupendous furrows in one direction, new quarters have been allowed to form themselves improperly somewhere else, with the result of costly reconstruction when the time comes for extending to them the main arterial system of the metropolis.

Nature of suburban development.

Perhaps if parts of this Parisian transformation had been delayed until a later period, certain causes would

CHAP. I.

have operated to make it less thorough. At the close of the French Revolution, and for some decades thereafter, there was in Europe no sentiment for old architectural monuments, and especially none for medieval churches. This sentiment now pervades all Europe; and the most affectionate preservation, with cautious, faithful restorations, is the order everywhere.

Such a spirit was lacking in the generations immediately preceding our own, and nowhere was its absence more complete than in the French capital. The religious orders had built their great monastic houses and their splendid churches everywhere in Paris. They were a privileged caste and a heavy burden. The Revolution had no mercy upon them or their beautiful architecture, and the new street system plowed through their churches as relentlessly as through shabby tenement rows. Scores of examples of the most beautiful ecclesiastical structures of the middle ages were obliterated to make room for broad, straight avenues, open squares, and new, regular buildings. Nowadays such sacrilege would not be tolerated.

Destruction of ancient churches.

It is fortunate, therefore, for the Parisians that their central street reforms were chiefly accomplished before the rise of the new appreciation of church architecture. There are enough old churches remaining throughout France, if not in Paris itself, to represent adequately the beautiful art and workmanship of the thirteenth and fourteenth centuries. The narrow old Parisian streets of the last century wound in and out among these venerable piles in a manner that modern traffic could not have endured. To have spared them would have been to deprive Paris forever of an adequate street system. It was far better to sacrifice them and to make the city uncompromisingly modern. The population in 1789 was about 600,000, and in 1889 it was 2,500,000, including that of the immediate sub-

Was the "vandalism" justifiable?

urbs. And with the fourfold increase of population there was at least a tenfold increase of traffic and of daily pressure upon the accommodations of the main street system. These facts, to my mind, fully vindicate the wisdom, redeem the "vandalism," and justify the immense cost of the modernization of Paris. It was the mission of France to teach the world a lesson of order, system, and logic, of emancipation and iconoclasm. Paris was made the visible embodiment of the revolt against the iniquities of the old régime, and of the creative vigor of the new era. We would not wish to see Rome modernized in any such spirit; and, indeed, the great reforms now progressing there, of which I shall write in a subsequent chapter, proceed upon the principle of preserving with the greatest veneration and care all important archæological remains and all worthy specimens of ecclesiastical architecture. But it was for Paris to sacrifice everything to the modern ideas of symmetry, spaciousness, and regularity, and to build the great opera-house as a central feature, and as a suggestive symbol of the new spirit.

The mission of Paris to embody the new era.

Louis XIV. and Louis XV. had not been without magnificent ideas for Paris, and they had left improvements — palaces, royal pleasure-grounds, boulevards, churches — that make a considerable array when put into a list; but these things, done to gratify the royal pride, had been of almost no benefit to the people, and had not affected materially the medieval conditions. The absolutism of these monarchs could never have availed to cut the Gordian knots of a thousand claims, prescriptive rights, and intolerable immunities that the nobles, the religious orders, the old guilds, and various other corporate and private interests tenaciously asserted. Only a revolution, sweeping everything away and beginning anew upon simple principles, could have effected any radical improvement.

Improvements under the Bourbons.

CHAP. I.

The work of remaking Paris, after the Revolution, was begun upon the lines of a general plan for the cutting of new streets, prepared by a so-called "Commission des Artistes." The plan included 108 distinct projects. Although political changes interfered with the full execution of this particular plan, the work of reconstruction did not cease. Under the great Napoleon the rues de Rivoli, Castiglione, des Pyramides, and various other modern thoroughfares were created. To the fifteen years of the Restoration a further considerable list must be credited, including, among others, the rues de Chabrol, du 29 Juillet, Lafitte, and those of the Quartier de l'Europe. And under Louis Philippe (1830–48) the rues de Rambuteau, de la Bourse, de Lyon, du Havre, de Mazagran, and others were opened.

Street reforms from 1790 to 1850.

But it was in the period from 1852 to 1871, under Louis Napoleon, that the most comprehensive and magnificent work was done. A huge scheme was laid out, under the supervision of Baron Haussmann as prefect of the Seine, for the binding together of all the quarters of Paris by a system of grand avenues of general communication.

The Haussmann scheme.

The reforms immediately following the Revolution had dealt almost exclusively with the astounding congestion at the very heart of Paris. Nobody but the student could now believe the whole truth about the changes that have been wrought since 1790 in the vicinity of the Louvre. The original Paris, ancient Lutetia, was nothing more than the island in the Seine upon which the Cathedral of Notre Dame stands. This Île de la Cité, as it is still called, contained at the period of the Revolution a great number of small streets, fifteen or twenty churches, and a population of twenty thousand or more. Those who visit it today find the island given over to a few great public

Reconstruction of the Île de la Cité.

buildings — the Central Courts of Justice (Palais de Justice), an immense hospital (Hôtel Dieu), the Prefecture of Police, the Tribunal of Commerce, and two or three other public establishments. It is flanked by broad, smooth stone quays, is symmetrically laid out with open squares and a few spacious streets, and not more than, perhaps, one tenth of its area is occupied by private buildings. Thousands of small, ancient houses were cleared away, and the modern Île de la Cité, with the restored cathedral, the splendid quays, the massive public edifices, the new bridges, the flower-market, and the morgue, made its appearance. A like transformation was wrought in that central portion of Paris lying between the Louvre and the Hôtel de Ville (City Hall), covered as it was with ancient huddled structures, among which narrow passages wound bewilderingly, and where *culs-de-sac* were found by the score. And thus also an examination of the maps and the historical monographs prepared by scholars who have restored for our knowledge the Paris of 1789, would show that the other innermost parts of the metropolis were boldly and ruthlessly dealt with in the decades following the upheaval.

CHAP. I.

Demolitions in the Louvre vicinity.

The task that the Emperor Louis Napoleon set before himself related not so much to the inner Paris of the old-time bounds — although his scheme also embraced prodigious reforms in the central area — as to the great town that had spread itself beyond the inner boulevards, and that lacked a main circulatory system. Not only did the outlying arrondissements need broad avenues of communication with the center and with each other, but the very fact of their existence, making a heightened traffic-pressure upon the old streets of the inner district, demanded the amplification of facilities at the core. With a bold and sympathetic spirit like Baron Haussmann as prefect of the

Projects of the Third Empire.

CHAP. I.

The remaking of the metropolis.

Department of the Seine (in effect the Emperor's appointed and permanent mayor of Paris), and with no authority to obstruct the rapid execution of his magnificent plans, Napoleon proceeded to reconstruct Paris as a Pullman Company creates a model town, or as the director-general of a universal exposition lays out his spacious grounds and arranges his showy edifices. Haussmann held his post from 1853 to 1870; and in that period he had created gigantic boulevards and avenues by the hundred; had laid out great numbers and large areas of open squares, parks, and pleasure-grounds; had erected public buildings in all parts of Paris; had with equal energy developed a sewer system and created a water-supply; and had given the people a scheme of public services far in advance of any other great city of that period.

The system of main thoroughfares.

The plan of the new Paris is by no means so geometrical and easily understood as that of Washington (which, it should be remembered, was laid out by a French engineer, who had brought to America the impulse and the ideas of the Parisian Commission des Artistes), but it is none the less a philosophical and practical arrangement. Originally the narrow streets and lanes of Paris were either parallel with the Seine in general direction, or were at right angles with the river. It became necessary to give the new Paris main thoroughfares broad enough and straight enough to accommodate traffic through the heart of the city along these original lines. Further, it was deemed necessary to construct a great number of diagonal avenues and boulevards directly connecting important localities. Still further, new lines of engirdling boulevards were found desirable; and finally, there were important reforms to be instituted in the suburban street systems. The net public expenditure incurred between 1852 and 1870 in carrying out the Hauss-

mann-Napoleon project of new boulevards and avenues was in excess of 1,200,000,000 francs. The gross outlay was much greater, but large amounts of the original investment were recovered from time to time by the sale of building sites, the municipality having, by condemnation proceedings in every case, acquired the properties through which in part a new street would pass.

Financial aspects.

After 1870 the work naturally proceeded with less energy, on account of military reverses, political changes, and heavy expenditures in other directions. But a number of important new projects have been carried out since 1875, and each year sees some addition to the main street system. Private individuals have been obliged to conform strictly to the plans and regulations of the municipality in building up the new frontage, and thus there has resulted that marvelous regularity—elegant and impressive rather than monotonous—which is the characteristic of Parisian street architecture. The period since the war with Germany has witnessed a greater fidelity in matters of detail, a higher degree of artistic taste and skill, and a stricter and more businesslike financiering. For nearly twenty years (from the war till his death in about 1893) the distinguished administrator M. Alphand, as director of the public works of Paris, gave his unceasing and comprehensive attention to all the problems that belong to the street system, the public architecture, the water-supply, and the drainage of a great city, and the list of his achievements would fill many pages. Under his supervision the Avenue de l'Opéra was constructed, with brilliant financial success, involving the renovation of the Butte des Moulins, one of the worst of surviving slum quarters. To this period belong the boulevards Saint-Germain and Henri IV., and many another great thoroughfare.

Private plans strictly controlled.

Alphand and the more recent street improvements.

Avenue de l'Opéra.

CHAP. I.

In the summer of 1891, on the occasion of the formal opening of the new Avenue de la République, the prefect remarked: "Important as this avenue publicly opened to-day may be, it merely adds one more to the network of highways of communication which within twenty years has given a new physiognomy to the capital. The misfortunes of war retarded for a time this movement of transfiguration; but as soon as France had regained possession of herself, Paris set herself to the task. Works of general utility rapidly succeeded one another, with tangible results that have been augmented a hundredfold by the concurrent activity of private enterprise, and the confidence of private capital in the public projects of development." The prefect goes on to recount the directions in which the work of public improvement has accomplished most since 1871; and he makes a very impressive summary. Indeed, the public works that have been executed in the twenty years from 1875 to 1895 have in all likelihood cost a larger sum in the aggregate than those carried out in the twenty years following the *coup d'état* of July, 1851. The Haussmann transformations were begun when Paris had only a million people and an area of only thirteen square miles. Their scope was enlarged when in 1861 the boundaries were extended to the girdle of fortifications and made to include thirty square miles, with a total population of 1,700,000. But in 1875 the authorities had to provide for nearly two million people, a number that in 1895 was fast approaching three millions. These last two decades have witnessed transformations less pretentious and not so widely advertised, but touching more closely and deeply the lives of the people, and ministering more perfectly to the best demands of modern civilization. Services of education, of cleanliness and of health, on a vast and varied scale, have occupied

Reforms under the Third Republic.

Magnitude of recent operations.

the administrative machinery that was once so engrossed with boulevards and architecture. These outward aggrandizements have had attention too, and the public works have been carried to perfections of detail that Napoleon's officials could hardly have anticipated. But greater stress in the period of the third republic has been laid upon the less palpable but no less important social services that enlist at once the best efforts of engineers, architects, sanitarians, sociologists, educators, artists, and philanthropists; and thus municipal Paris to-day, as never before, is equipped for the positive promotion of the well-being of all its people, old and young.

Social services now take first rank.

In Paris before the Revolution there was, as Mr. Frederic Harrison has said, "a chaos of competing authorities, a tangle of obsolete privileges, and a nest of scandalous abuses. Anomalous courts jostled and scrambled for jurisdiction; ancient guilds and corporations blocked every reform; atrocious injustice and inveterate corruption reigned high-handed in the name of king, noble, or church." This, indeed, does not tell us what the mechanism of the municipal government was, but it shows us well enough its spirit and its results. For our purpose it suffices to add that the city, so far as it was centrally governed, was administered by a provost, or mayor, deriving authority directly from the king; and that various old, surviving local bodies shared, in an anomalous way, in the minor affairs of the municipality.

The old-time municipal régime.

The liberal legislation of 1789–90 gave Paris, with the other communes of France, a fully constituted, autonomous municipal government. The city was divided into forty-eight sections, each of which elected two common councilors, in addition to which a body of thirty-two councilors of higher rank, or aldermen,

The home-rule system as adopted in 1790.

CHAP. I.

were elected, while the executive work was intrusted to a popularly elected mayor and sixteen administrators, so called. The whole body of 145 governed the city, the mayor presiding over the council and directing the active administration. In the fact of the popular election of the mayor this constitution resembles those of our American cities. The councilors and administrators were elected for two-year terms, half of the places being filled annually. It was a fairly acceptable form of municipal government. But the Directory, in 1795, with its theory of cantonal administration, consolidated the smaller communes of France and cut up the larger ones. Paris was divided into a dozen municipalities, with some sort of central administrative bureau, which the Directory constituted and managed in its own interest. The work that the Directory began, Napoleon completed. He abolished absolutely the central mayoralty, and created the semblance of a central communal council, all the members of which were his own appointees. In each of the twelve sections, or arrondissements, as they have since that time been called, he established a so-called mayor, with assistants. But these officers were simply the local agents of the prefect, and were in no usual sense municipal authorities. The real governor of Paris was the prefect of the Department of the Seine—a department including Paris and some suburban communes. All administration was in his hands. In the levying of taxes and the planning of public works he had the advice of the municipal council of Paris and of the council-general of the department, all the members of which were the appointees of the central power. The revolution of 1830 improved matters to the extent of giving to Parisians of certain electoral qualifications the right to choose the municipal council. But the central mayoralty was not re-

Changed by the Directory in 1795.

How Napoleon governed Paris.

The masterful prefect.

The elective council of 1830.

vived, and the prefect, with his subordinates, and with the appointive officers of the arrondissements, governed the city still.

Autonomy briefly restored in 1848.

As in the country at large, so in Paris the brilliant revolution of 1848 restored for a brief interval the autonomy of communities. Paris again had its elected municipal council, its own chosen mayor and executive staff. But the empire of Louis Napoleon took the city completely out of the hands of its inhabitants and restored the system of the first empire. The national assembly of 1871, after the downfall of the empire, restored to Paris its elective council, but stopped there, promising that further concessions to the principle of self-government should be made at some subsequent time. Since then the suffrage, which was virtually universal, has been made entirely so. But Paris is still actively governed, as under Louis Napoleon, by the prefect of the Seine and his colleague, the prefect of police, both of whom are appointed by the general government and are amenable directly to the Minister of the Interior. In the smaller communes of France the police power is now confided to the municipal authorities, and is exercised actively by the mayors. In the larger ones a purely domestic police authority is exercised by the municipal officers, while a general control of police is vested in the prefect and his sub-prefects. But Paris is deemed too vast for the union of ordinary business administration and police administration in the hands of the one prefect of the department; and the police authority, covering a wider range of functions than the simple organization of the police force and the management of the police courts and station-houses, is put in the hands of a separate official, the prefect of police.

Napoleonic methods revived in 1852.

Concessions since 1871.

The two prefects.

Police authority.

Paris has now for many years been subdivided into twenty arrondissements, and in each of them there is

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The twenty mairies.

a central building called the "mairie," in which is the bureau of an officer called the "maire" (mayor). He is assisted by three adjuncts. These men, who are appointed officers of the general government, and are, in fact, simply the agents or delegates of the prefect of the Seine, with a staff of clerks and assistants, attend to a vast amount of routine business for the higher authorities and for the city so far as the population of their several arrondissements is concerned. They make the registration lists for elections. They record births, deaths, and weddings, and perform the civil ceremony of marriage. They receive taxes, have to do with matters of elementary education, render "assistance publique," —*i. e.*, administer the poor laws in their respective districts,—enroll under the army-service acts those liable to military duty, and perform various other routine functions. These twenty Parisian centers of local administration are admirably organized and conducted, and under any scheme whatsoever of a reconstructed municipal government they would be allowed to remain.

Centers of local administration.

The municipal council.

The municipal council of Paris consists of eighty members, four from each of the twenty arrondissements. Each arrondissement is subdivided into four quarters, and each quarter elects a municipal councilor. They are elected for three years, and all retire together. The municipal council of Paris, plus a few representatives of the outlying communes of the Department of the Seine, constitutes the council-general of the department. Since these outlying communes (grouped in the two arrondissements of Sceaux and Saint Denis) are, in fact, the immediate suburbs of Paris, there seems to be no good reason why the city's jurisdiction should not be made coextensive with that of the department, so that the business of the municipal

Suburban government —the Department of the Seine.

council and that of the council-general might be merged. The communes outside the fortifications of Paris have their elective councils and distinct municipal organizations, but all come under the common executive control of the two prefects.

A central mayoralty demanded.

Ever since 1871 there has been a constant demand upon the part of Paris, as represented by its municipal council, for a restoration of its central mayoralty and a release from its alleged position of tutelage. The situation of the council is declared to be humiliating and unsatisfactory. Its champions assert that it is dominated by the prefect, who has the right to attend its sessions and to take the floor whenever he pleases, and who is absolutely unaccountable to it for his management of the city's business. The council has, it is true, large discretionary power over finances and taxation, and indirectly controls most of the departments of administration, and the construction of public works, through its hold upon the purse-strings. But the complaint is made that it is, at best, hampered and restricted. The prefect is in theory accountable to the Minister of the Interior: but the prefect has not only to administer the affairs of the city, but also to act as the political representative of the government of the day; and in fact it is in his character as the political agent of the government, we are told, that he is held accountable. French ministries are too short-lived, and too busy with interests more vitally affecting themselves, to permit the Minister of the Interior to hold the prefect of the Seine to a frequent and careful accounting for the ordinary administration of the affairs of Paris. Such is the argument of the Parisian autonomists.

The autonomist argument.

There is some reason to believe that Paris may ultimately be given its own elective mayor and ex-

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ecutive corps, but there is no immediate prospect of such a change. The question has been much considered by the municipal council. A few years ago a council committee of which Sigismund Lacroix was chairman reported an interesting scheme of municipal organization for Paris. Nothing serious ever came of it, and reforms on paper are too numerous in France to be remembered from one season to the next. Nevertheless, Lacroix's plan possesses for our purposes a certain illustrative value because it embodies French views of municipal organization for a great city. It provided for a council consisting of at least four members from each arrondissement, but with additional representation for the larger ones, increasing the total body from eighty to one hundred and nine members. The councilors were to be elected for three years, one third retiring annually, as in England, and the elections were to be upon a general arrondissement ticket—a great improvement upon the present plan of "uninominal" election in quarters, which necessarily tends to fill the council with obscure men. It was provided that this council should be free from the present possibilities of suspension and dissolution by the higher authorities.

A proposed new constitution for Paris.

Paris is the only French city that is without its own mayor, Lyons having recently been allowed to resume a full-fledged municipal government after years of tutelage similar to that of Paris. The Lacroix proposition authorized the council to elect from its own membership a mayor and eight adjuncts, forming an executive corps. Each of the adjuncts was to be assigned to the leadership of a municipal department, for which he should be responsible to the council, while the mayor was made accountable in a general way as chairman of the executive corps. The mayor and the adjuncts were to keep their seats

Election of mayor and adjuncts of council.

in the municipal council, with power to speak and to vote. In all the other French cities the mayor is also the presiding officer of the council; but Lacroix's committee held that in the case of Paris it would be advisable for the council to relieve that functionary from the routine duties of the presidency, and to name another member of the council for the task of the speakership of the municipal parliament. The executive corps—*i.e.*, the mayor and his eight adjuncts—was invested with the appointing and removing power for all employees and agents of the municipal administration, upon the initiative of the adjunct whose particular department was concerned. To do the routine work now done in the mairie buildings of the arrondissements, it was provided that four or five officials should be appointed by the mayor's corps as "delegates of the mairie," to render the services now performed by the agents of the prefect. The council was to have full control of taxation and finance, but could not borrow money without the direct ratification of the voters at a popular election. The municipal authorities were to have entire management of the educational system, primary, secondary, and higher.

To have seats in the council.

Appointing power.

Administration and finance.

Apart from the peculiar conditions under which Paris is placed, these propositions, as it seems to me, embody an excellent municipal constitution. Its harmony and simplicity are not the least of its merits. Although it was an unrealized project, it is worthy of notice as an indication of what current European judgment and experience would pronounce a good framework of municipal organization.

An excellent municipal framework.

It must not be supposed that all elements in Paris are clamorous for a larger degree of municipal autonomy. The educated and propertied classes, as a rule, prefer that the general government should keep its strong hand upon Parisian administration. They

The conservative sentiment of Paris.

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are somewhat distrustful of the municipal council, which they regard as radical and socialistic in its tendencies. There is very much to be said upon both sides. Paris has always, except for the brief intervals of the first and second republics, been administered by the central authorities. The change of prefects has at times been frequent as ministries have risen and fallen; but the skilled administrative heads of the various municipal services, together with their corps of trained civil servants, have been practically permanent. It has been possible to carry out great policies of public improvement, and there has been a high and well-ordered efficiency in the execution of all kinds of municipal functions. If the municipal council had been all-powerful, it is possible that public business would have been less effectively prosecuted, and also that public works would have been upon a less magnificent scale. Upon the other hand, it is possible that the real welfare of the masses of the Parisian people would have been more carefully guarded in some respects, and that the burdens of taxation would have been lighter. These are controverted questions, and I am not able to answer them.

Efficiency of the prefectoral government.

The municipal council certainly contains a number of able and honest men; but as a whole it is open to the charge of being a body of men mediocre and unknown, and the primary reason for this is plain enough. Each member is elected in a separate district, eighty in all. The opportunity for what we in America call "ward politics" is altogether too favorable. It is not, of course, legally requisite that the councilor should be a resident of the quarter he represents, but in practice he is likely to be. Candidate A placards the quarter with gaudy posters declaring that as a resident he can represent the people far more satisfactorily than

Character of council members.

candidate B, who lives in an arrondissement at the opposite end of the city. Whereupon candidate B issues a manifesto in which he promises to obviate the difficulty by taking a residence in the quarter if he is elected.

Effect of small districts.

Such a system does not tend to fill the council with men known to Paris at large. Election upon a general arrondissement ticket, as proposed in the Lacroix draft, and as harmonizing with the general municipal system of France, would result in greatly improving the average quality of the council. I am inclined to the opinion that it would be still better to elect a portion of the council upon a general ticket for the whole city, with the idea of securing men of acknowledged note and standing for candidates. While, then, I must confess some sympathy with the idea of greater municipal autonomy for Paris, I can also appreciate the reasons which actuate conservative Parisians, remembering the horrors of the communal uprising of 1871, in clinging to the strong arm of France.

Desirability of election on general tickets.

I would not for a moment have it inferred that the council of Paris as at present constituted is not a more intelligent and efficient body of men than the average council or aldermanic board of a large American city. If it had somewhat more control over the executive administration, and if it were elected upon a less minutely local plan, I believe that it would soon become a magnificent assembly to which it would be a great honor to belong — superior, possibly, in distinction to the councils of Berlin and Vienna, and equal to the new council of metropolitan London. Such positions should have no emoluments, or else should have large ones. A Paris councilor is not supposed to draw a salary, but he has been accustomed to allow himself 4000 francs a year for expenses. In view of exceptional demands, he increased this allowance for the

Comparative standing of the Paris council.

CHAP. I. Exposition year 1889 to 6000 francs ($1200), and he has since neglected to reduce it.

To understand aright the municipal system of Paris, one must bear constantly in mind the relationship that the capital city bears to the nation. The citizens of Marseilles have comparatively little interest in the municipal affairs of Lyons. Local institutions in the provinces concern only the localities or the provinces individually. France as a whole has ordained a certain uniformity in the type of local government, and has retained from the Napoleonic era a centralized system of executive oversight; but in ordinary matters France has no disposition to interfere with municipal and communal self-government. The case of Paris, however, is wholly exceptional. The great capital city is regarded as belonging not alone to its citizens but also to all the people of France. Its magnificence has been attained in large measure at the cost of the national treasury, through many decades and under different dynasties and forms of government. The French nation at large is not conscious of any feeling of hostility toward Paris, and has no other policy for the capital than one of ambitious liberality. The aggregation of national establishments at Paris is something without parallel in any other country. The central government continues by yearly subventions to bear a considerable portion of the cost of various departments of the municipal administration. Inasmuch as the governmental organs of the French republic are all of them centered in Paris, a municipal government carried on by a prefect who is directly accountable to the national rather than to the municipal chamber does not of necessity result in friction. Upon its face, the demand for a mayor to be elected by the municipal council of Paris would seem at first to be reasonable; but a more careful

National claims upon Paris.

Reasonableness of national participation in Parisian government.

study of the situation, both theoretically and practically, has led me to the conclusion that as satisfactory results are probably obtainable through the present system, which unites national and local authority in the government of Paris, as would flow from one which would seem to give the citizens a higher degree of autonomy.

Certainly the government of Paris at first seems to divide responsibilities in a manner likely to produce constant friction, and to interfere most distractingly with the accomplishment of large plans requiring harmony and foresight. The municipal council, elected by the votes of all the citizens of the eighty quarters, meets in its sumptuous hall in the Hôtel de Ville almost every day to debate all points of municipal policy and outlay. In its hands rests the all-essential power to vote supplies or to withhold them. Its eight or ten large standing committees are at pains to acquaint themselves with all the departments of practical municipal activity.

The sphere of the council.

But this municipal council has no immediate authority over the administrative machine. The prefect of the Department of the Seine, who owes his appointment to the general government, and whose immediate superior is the Minister of the Interior, is in fact the mayor of Paris, with complete executive authority; that is to say, his authority is complete within the sphere assigned to him, and is incomplete only to the extent of those municipal tasks the management of which has been confided by law to the prefect of police. For limited and well-defined purposes, the prefect of police may also be regarded as mayor of Paris. In theory, it is somewhat difficult to draw the line that separates the jurisdiction of these two high officials. In practice, however, that line has been well demarcated,

The sphere of the prefect.

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The prefects as mayors in colleague.

and each understands where his own responsibility ends and that of his colleague begins. In case of any actual disagreement, the disputed question is referred to the Minister of the Interior, whose decision settles the immediate issue and also forms a precedent. It would be entirely possible to make the prefect of police a great bureau chief subject to the prefect of the Seine as his superior; but, with the general government near at hand to reconcile all differences, the plan of a dual mayoralty does not work badly in practice. It grows, moreover, out of very ancient Parisian customs. In general, the prefect of the Seine has control of most of the great regular departments of municipal administration; while the prefect of police, although some of his functions have from time to time been transferred to his colleague, retains control over the ordinary police administration, is the strong right arm of criminal justice, and has charge of various services relating to the safety and convenience of traffic in the streets, the protection of life and property, the enforcement of sanitary regulations, and several kindred matters.

Functions of the police prefect.

The municipal council elects its own president and has its own interior organization for its work. The two prefects have the right of the floor in all meetings of the municipal council, and may always demand a hearing. They may also bring with them their important assistants and heads of working departments. The prefects, with the aid of their bureaucracy of subordinate executive officials, make up the provisional budgets, and assist in the discussion of all financial questions in the sessions of the municipal council. As regards parts of the budget, including the police estimates, the law requires that the council vote the sums asked.

Relation of prefects to council.

The changing personnel of government.

Inasmuch as French cabinets rise and fall with proverbial frequency, there is the constant possibility of a change in the offices of the two prefects who administer Paris. Naturally the government of the day would wish to be certain of the loyalty to itself of the great administrative heads of the capital city. With the complete renewal of the entire municipal council every three years under a system of universal suffrage, and with eighty small districts electing each a single member, there is always practical certainty of a considerable number of new councilors. There are numerous quarters, it is true, that have reëlected their councilor for several successive terms; nevertheless, no one can deny the palpable fact that the municipal council of Paris is a radical rather than a conservative body, and that, while possessing a good average of intelligence and personal character, its tendency is towards doctrinaire innovations.

Over against this rather strenuous and high-keyed chamber of eighty councilors — who certainly have much less of bourgeois caution and of instinctive respect for the large taxpayer than corresponding municipal councils in England and Germany — the observer finds a great administrative organization completely in the hands of a government prefect, supplemented by a colleague of like rank who exercises police jurisdiction. When, as a foreign inquirer, I have sought to learn whether the prefect or the council really dominated Paris, I have found much conflict of opinion. The majority of the municipal council themselves, together with the host of advanced Parisian radicals and the growing army of socialists, declare that the prefect is dominant, and that Paris is thereby deprived of its appropriate measure of municipal self-rule. They demand an organization like that of any other French city,

Does prefect or council really dominate?

CHAP. I.

Depends upon the point of view.

whereby the mayor and the executive government may be evolved out of the bosom of the popularly chosen municipal council. On the other hand, the prefects themselves, and the great majority of those citizens who call themselves conservative and moderate in their political views, declare that through its hold upon the purse-strings the municipal council exercises a sufficiently dominating local control over administration, and that the constant presence of the prefect on the floor of the municipal chamber, where he is subjected to the full moral influence of every debate, brings him into such intimate and vital relationships with the representatives of the citizens that the average result is not discordant.

Harmony of motive.

It must be remembered that the French cabinet is the creature of the Chamber of Deputies, that the chamber itself is keenly sensitive to the influence of Parisian public opinion, and that all political elements and interests are in general agreement upon the proposition that the splendor of Paris must be maintained and increased, and that its municipal services must be conducted with the highest attainable degree of administrative probity, efficiency, and technical skill. The municipal council, certainly, cannot be accused of any apathy with regard to the municipal aggrandizement of Paris. Being relieved of all direct responsibility for the actual handling of the public revenues, the councilors are subject to comparatively slight temptation. They have no contracts to let, no departmental offices at their disposal, and in short the least possible chance to use their power for private gain. But, with a natural jealousy of the prefect, who is not of their own creation, and who is not directly accountable to them, they are at liberty to watch his administration with the utmost keenness. In the exercise of their control over the bud-

Council subject to little undue influence.

get, they are naturally eager to scrutinize all expenditures, with no motive for passing over anything that could be deemed questionable.

On the other hand the ministry of the day, conscious of the precariousness of its tenure and aware that any detected unfaithfulness on the part of its important agent the prefect of the Seine might easily cause its own downfall, has every motive for keeping in that important post, as well as in the corresponding post of police prefect, a man of tried and approved personal character and administrative efficiency. Thus the existing system, which involves a certain measure of rivalry between the municipal council on the one hand and the prefect's executive organization on the other, does not of necessity dissipate responsibility. In this particular instance, indeed, it appears to stimulate good behavior on the part of both. The council has the more time to consider and debate general questions of municipal improvement, and to scrutinize every phase of the administrative government, while the prefect on his part must endeavor at once to satisfy the requirements of the general government and to maintain a good *modus vivendi* with the municipal council.

Good behavior stimulated by rivalry of zeal for Paris.

But the most essential factor in the municipal life of Paris is not the prefect who wields the executive authority, or the municipal council with its power to control policies and to pass upon the details of a minutely analyzed financial budget. There can be no comprehension, however faint, of the government of Paris which does not take into account the superb permanent organization of the civil-service machine. It is to this *tertium quid* that one must look if he would discover the real unity and continuity of the administrative work of the Paris municipality. Prefects may come and go, ministries may change with

The civil-service organization as the great factor.

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the seasons, and municipal councils may debate and harangue until they make the doings at the Hôtel de Ville a byword for futile and noisy discussion. But the splendid administrative machine moves steadily on. Herein lies the explanation of much that puzzles many foreign observers, who cannot understand how to reconcile the seemingly perfect system of French administration in all matters of practical detail with the rapid and capricious changes in the highest executive posts.

The permanent administrative machine.

The administrative machinery of Paris is complex but unified. At the head are the offices of the two prefects, highly elaborated with divisions and bureaus for the oversight of each main department of the executive system. Thus there is a department of records and accounts methodically and perfectly organized; the municipal finances have their expert and permanent machinery; the assessment and collection of taxes, the management of the octrois, all come under the control of permanent bureaus. The public works of Paris are carried out under the supervision of a director of public works (*Directeur des Travaux de Paris*), who is aided by a splendid service of architects and engineers, and whose department is subdivided into various bureaus, and conducted with all that talent for method and system in these matters which the French have shown themselves to possess in so high a degree. Public instruction is organized on similar lines of thoroughness and permanence. And the same thing may be said of all the other departments which belong to the prefect of the Seine. The prefect of police has under him, in like manner, a system minutely organized from top to bottom.

While the prefect for the time being stands at the head of the great administrative structure, it in no

sense belongs to him. Nor does it belong to the municipal council; for councils come and go almost as rapidly as prefects and cabinets. It belongs rather to the community and the country. This wonderful machine, which includes policemen, firemen, schoolteachers, street-cleaners, bookkeepers, civil engineers, architects, and even artists, is altogether out of politics. France might to-morrow accept the sway of a military dictator; but this need not involve a single change in the personnel of the tens of thousands of men who make up the administrative organization of Paris, with the bare exception of the two prefects. On the other hand, the most extreme of the Parisian socialists and communists might have their way, and the result would be a single mayor elected by the municipal council to replace the two prefects. But otherwise there would be no occasion for any changes in the administrative machine, except by way of enlargement on account of the increased range of direct municipal undertakings which would soon follow the triumph of the radical contingent.

Independent of political change.

As matters now stand, every element in the national political life that centers at the capital, and every party or group in the municipal council or in the citizenship of the town, has an equal interest in maintaining a perfect administrative system for Paris. There may be much strife and contention for the privilege of dominating that machine; but there can be no wish in any important quarter that the machine should be otherwise than admirable and efficient. It must not be forgotten that a similar permanency belongs to the organization of the departments of the French general government. Thus, when Parisian municipal affairs are referred for decision or for indorsement to the Minister of the Interior, it is probably not the minister himself in nineteen cases out of

The common interest in a perfect civil service.

CHAP. I.

twenty who passes upon them, but the permanent bureau officials to which such appeals are always referred, and who have had vast experience in dealing with them.

It has some inevitable faults.

The administrative organization of Paris cannot, of course, be wholly free from the faults that pertain everywhere to such systems. Bureaucratic methods, supernumerary officials, mechanical and perfunctory service, insidious abuses here, petty favoritisms there, all mar the ideal perfection of the structure. But when this is said, it remains true that the execution of the varied municipal business of the French metropolis is in the hands of a marvelously well-trained and faithful body of public servants, through whom the general government by its prefect on the one hand, and the municipal council on the other, can carry out most satisfactorily whatever lines of policy may be determined upon. If the water supply is to be extended, if public buildings are to be erected, if new bridges are to be constructed, if a new boulevard is authorized,—it matters not whether the public work be ordered and paid for by the general government, by the municipal council, or by contributions from both treasuries,—in any case the execution of the project is committed to the prefect, who in turn assigns it to the director of public works, at whose command is a highly specialized working organization, equal — to make the highest American comparison — to the engineer corps of the war department, or to the construction bureau of the naval department.

But it is equal to its tasks.

Initiative in the public service.

Nor must it be understood for a moment that this *tertium quid*, this permanent administrative organization, is merely passive and obedient. As a practical matter of fact, it is full of men of genius and enthusiasm, zealous for the advancement of Paris along the lines of their own special departments of admin-

istration. These men have abundant opportunity to present their views to the prefect and, in one way or in another, to the municipal council. Thus, for example, if one should propose to assign individual credit for the modern transformation of Paris, it would be as necessary to recognize the immense value of the labors of the late director of public works, M. Alphand, for the period since the Franco-German war as to recognize the influence and energy of Baron Haussmann as prefect of the Seine in the preceding period. I have already spoken of M. Alphand's career as director of public works for some twenty years. He filled that post with a supreme devotion and ability, and with untiring solicitude for the adornment of Paris, the perfection of its public services, and the honesty and good quality of its engineering and architectural constructions, whether below the street surface or above. And what has been said of the high credit due to this distinguished public servant might also be said of men who have occupied themselves with the development of the magnificent school facilities of Paris, or with other departments of municipal life.

The director of public works as an instance.

The popular educational system of Paris, with its almost unrivaled adaptation to the demands of real life, furnishes a constant stream of suitable applicants for places in the lower grades of the various municipal and civil services. All admissions are based upon appropriate and impartial examinations. Promotions are made upon approved principles from within the ranks. The system is not so mechanical as to preclude the recognition of special talent, but it affords scant opportunity for injustice or favoritism. The higher grades and branches of the public service draw upon the splendid series of municipal and national technical and professional schools, which train men

The schools as feeders of the civil service.

CHAP. I.

for every special department of municipal activity. Removals from the service are not made upon arbitrary grounds. Political considerations have nothing to do with municipal employment. Faithful continuance in the service is rewarded ultimately by retirement on life pensions. There is every incentive to fidelity. The red tape and circumlocutions of so elaborate an administrative system are only minor objections. Where the work to be performed is so enormous in its dimensions, and so varied in its details, no system less firmly coördinated, and less perfectly elaborated, could in the long run produce efficient results.

Retirement pensions throughout the system.

The twenty arrondissements of Paris are not bounded by temporary lines, nor are they mere electoral divisions like American city wards, or units of representation like our congressional and legislative districts. They are not subject to rearrangement in order to equalize their population. Some are much more populous than others, and the municipal council, therefore, with its four members from each arrondissement, does not represent the population with mathematical equality. But it will be found by far more convenient to assign additional members to the more populous arrondissements than to recast the lines in order to create districts of equal population. The arrondissements are designated by numbers from one up to twenty; but they are also named, and the names are suggestive of much neighborhood history and local tradition.[1] Inasmuch as the centralizing administra-

Permanence of the arrondissement lines.

[1] The twenty arrondissements of Paris bear the following designations:

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| I. Louvre. | VIII. Élysée. | XIV. Observatoire. |
| II. Bourse. | IX. Opéra. | XV. Vaugirard. |
| III. Temple. | X. Enclos Saint-Laurent. | XVI. Passy. |
| IV. Hôtel-de-Ville. | XI. Popincourt. | XVII. Batignolles. |
| V. Panthéon. | XII. Reuilly. | XVIII. Butte-Montmartre. |
| VI. Luxembourg. | XIII. Gobelins. | XIX. Buttes-Chaumont. |
| VII. Palais-Bourbon. | | XX. Ménilmontant. |

tive tendency is so exceedingly strong in Paris, it is highly fortunate in every-day practice that the twenty arrondissements should have gained each its own sense of permanent neighborhood identity. It is true that the people of the arrondissement have no local elective body. Nevertheless, there is a neighborhood life that centers in the commodious mairie building of each arrondissement. These twenty divisions make it easy to distribute and apportion the numerous administrative tasks that bring the government into contact with the people. Thus the arrondissement becomes the ready and natural unit for the administration of the school system. Moreover, instead of dealing with the central authorities of the prefecture at the Hôtel de Ville, the people have only to go to the familiar mairie of their own arrondissement to report births and deaths, and to conform with all the rules and regulations touching the record of vital statistics. It is here, as I have already remarked, that the civil ceremony of marriage is performed by the maire of the arrondissement. Here the registration of voters is made and kept, election arrangements are made, and jury lists are selected. It is here, also, that the youths of the arrondissement are registered for purposes of military obligation. From the mairie of the arrondissement proceed the assessment and collection of all taxes. For minor licenses and privileges it is sufficient to make application at one's own mairie. Through this agency the wonderful popular loans of the municipality and of the state reach the small investors of Paris. The mairies form ideal library centers, and they contain the reading-rooms and the branch reference and circulatiug libraries of the municipality. Obviously, the arrondissement forms the local center for all work of public relief and charity. It will be found to contain its local branches of the

Neighborhood life centering at the mairies.

How the arrondissement brings government home to the people.

The mairies as social centers.

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municipal savings-bank system, and also its branch of the *mont-de-piété* — the great municipal loan agency, or pawnbroking shop.

Thus the arrondissement of Paris is the local administrative unit. It is the institutions thus centered in the twenty districts that come into contact with the daily life of the people. The maire and his three adjuncts are appointees of the central prefecture, and are regarded as the prefect's local agents. But they are not capriciously removed or shifted about, and they grow into the exercise of a very strong neighborhood influence and authority, with every motive for faithfulness to the welfare of the people with whose affairs, from the cradle to the grave, they are so intimately associated. With no conscious interchange of ideas or methods, the best administrative minds of London and Paris have come to a similar conclusion touching the principle of what I have elsewhere called "sub-municipalities," as local centers for a very large part of the practical governing business of a great metropolis. In London it is now proposed[1] to give a mayor and an elective council to each one of these sub-municipalities, and to confer upon them — under the control and supervision of a great central council and mayoralty — a very considerable range of executive work and authority. The genius of the Paris system is different. All discretionary authority and all deliberative functions belong to the government of the metropolis as a whole. But the carrying out of as large an amount as possible of the executive work is assigned to the agencies or bureaus which the central authorities have established in each one of the sub-municipali-

Influence of the mairie officials.

The "sub-municipality" idea in London and Paris.

[1] See report of Royal Commission on London Unification, as discussed in my volume on "Municipal Government in Great Britain," pp. 257–62. See also Appendix III of same volume.

ties. The title of maire, conferred upon the chief functionary at the mairie building of every arrondissement, is well calculated to emphasize the dignity and permanence of the neighborhood régime, and the lasting identity of the arrondissement's territorial bounds.

The police — a controverted topic.

Upon no Parisian topic does the foreign questioner encounter opinions more diametrically opposed to each other than upon that of the police administration. In the scheme of Lacroix and his colleagues, to which I have made reference as fairly typifying the perennial projects of the Parisian radicals, it was proposed that the so-called odious prefecture of police should be abolished altogether, and that the police authority should be invested in the mayor and municipal council in accordance with the Parisian constitution of 1790, as also briefly revived in 1848. The prefecture of police for the department of the Seine has been described as the masterpiece of Bonaparte's administrative system. It was reconstituted in 1853 by Louis Napoleon as an indispensable part of his centralized government; and the third republic — which clung tenaciously to the principle of centralized administration, although willing to grant much to localities on the side of elective councils — retained the police prefect for the metropolis and its environing department of the Seine, continuing to employ him as the direct agent of the general government.

Napoleon's police prefecture still maintained.

Functions of the police department.

The functions of this police prefect are varied and extensive. He controls not only the ordinary police that patrol the streets and keep order, but also the detectives and officers who constitute the "police judiciaire," and who work up criminal cases. Besides these, he is master of the political police,—

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the government's secret agents,— and he has in his hand a secret-service fund to spend unaccountably except as regards his immediate superior, the Minister of the Interior. His department covers the maintenance of order everywhere in streets and public places, the punishment of misdemeanors, the inspection of weights and measures, the organization of important life-saving and sanitary services, authority to permit or to forbid public spectacles, licenses of numerous sorts,— such as omnibuses and cabs and river steamers,— the regulation of certain trades and callings, and, in general, the control of a number of services that affect the security of life and property, the public health, and the convenience of a great community. It belongs to his functions to know who comes and goes, what persons are registered in the hotels and boarding-houses, what meetings are held, what public utterances are made, what things are said in print. In Paris, naturally, every form of offense against the laws, from anarchist plots to common swindling, finds its center so far as France is concerned. And the whole tendency of the century has been to strengthen rather than to weaken the concentrated authority of the police prefect at Paris, for the prevention and detection of crime, and to hold in check the elements of social disorder.

A censor with vast authority.

The municipal autonomists have been accustomed to declare that the police prefect is at once the most unaccountable and the most powerful man in France. They make the charge that in all this varied array of business he has practically to please nobody besides himself. They place much emphasis upon the fact that when his annual budget— which is distinct from the budget of his colleague the prefect of the Seine — goes to the municipal council, the law makes it obligatory upon that body to allow it in sum total, ap-

The police prefect as viewed by his critics.

propriating the funds demanded without subtraction at any point. They assert, moreover, that he is in fact held accountable nowhere for the expenditure of the vast sum that he draws from the municipal treasury every year. To continue the argument in the vein of these opponents of the police prefect, his function is declared to be one of darkness and mystery, a fit creation of such rulers as the Napoleons, but with no proper place in a republican form of government. Engaged as he must be in the secret service of politics, promoting the aims and ends of the men who for the day hold the reins of national power, he is not the suitable person, we are told, to administer the ordinary police government of a city.

This controverted subject has, however, another and a very different mode of approach. According to the French theory, the police power of the state is divisible only for purposes of administrative convenience. The prefects of the eighty-seven departments of France are the direct, appointed agents of the central government; and each is in exercise of a general police supervision over his region. The departments are divided into arrondissements, in each of which a sub-prefect is stationed, who in turn exercises a more minute supervision over the police affairs of his smaller territory. The primary divisions are the communes and municipalities; and in them it is true that the ordinary police authority has been committed to the mayor and municipal officers. But every French mayor is regarded as at once an agent of the state and the chief executive officer of his town. It is in his capacity as an agent of the state that he exercises police authority. Now, returning to Paris, the friends of the present system would explain that even if Paris had its own popularly chosen mayor, with police authority invested in him and his assistants, the French

The French theory of police power.

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system as a whole would make it necessary that a departmental prefect representing the state should exercise a large contingent measure of supervisory authority over his conduct, particularly as regards matters of police. But inasmuch as all the political and judicial mechanisms of the French nation find their central embodiment within the compact territorial limits of Paris, the national authorities of necessity have a paramount interest in the maintenance of a trustworthy local police service. So inextricably, it is held, are national and local interests blended, and so indispensable is the requirement of a perfect understanding and an unbroken harmony between the general machine of national administration and the local machine of Parisian administration, that the simplest solution lies in the direct, prefectoral government of Paris, without the intervention of any such citizens' representative as a mayor.

Reasons for direct control at Paris.

The municipal council, it is true, must vote to the prefect of police the whole sum that he demands. But it is not compelled to act blindly. The prefect brings in to the council a very elaborate printed budget, in which he sets forth with much detail his itemized estimates for the coming year, comparing the estimates with the corresponding items for the year that is current. The council is in a position to acquaint itself with all that is being done, and is able, in point of fact, to secure the enlargement or the modification of the prefect's policy at various points. On the other hand, the police policies and expenditures are subject to the Ministry of the Interior, which is so organized that permanent and expert officials are able to hold the prefect to a severe accounting. Still further, the municipal council, which is compelled to vote the taxpayers' money for a police establishment that it does not control, may always find some solace in the fact

The police budget.

Police subvention from national treasury.

that the general government pays something for its retention of police authority. The annual subvention out of the national treasury toward the police of Paris amounts to more than ten million francs a year, or in round figures to one third of the entire budget of the police prefecture, and to nearly or quite one half of the cost of the police service strictly speaking. So long as the police system is reasonably efficient, the citizens of Paris might well prefer national control with the national subvention, rather than the more or less empty privilege of municipal control with the whole bill payable out of the municipal treasury.

A traditional prejudice.

The prejudice against the police prefecture is to a large extent traditional. Under arbitrary Napoleonic rule it is easy to understand how the police system could have been used as an instrument of oppression and tyranny. Theoretically, it is always susceptible to use as a political instrument. But under republican institutions there exists only to the most limited extent either the motive or the opportunity to employ the police power for any other than legitimate ends. No minister for many years past has held his seat firmly enough to attempt any seriously objectionable use of the Parisian police system for improper political purposes. The dark and mysterious police power which a certain type of French novel has long exploited seems to be quite obsolete in Paris. Neither the Chamber of Deputies nor the Senate would tolerate the police system as it exists to-day, with its obligatory budget, if it were not in fact an orderly and efficient system manned from top to bottom by officers who have entered the service upon examination for fitness and have been promoted for merit. The ten or twelve thousand officials who are upon the pay-rolls of the prefecture of police constitute a body

An orderly and excellent service.

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of men organized as methodically as an army. Nothing could be much further from the truth than to assume that the great power vested in the prefect means any looseness or corruption in the ordinary administration of the police system. The peace and good order of the metropolis are well maintained; the courts of justice are ably served by that portion of the police system which makes up the police judiciaire; and the special municipal services of inspection and oversight committed to the care of the prefect of police are admirably conducted. The fact that prefects, though accountable to the Minister of the Interior, nominally hold their commissions of appointment from the President of the Republic, tends to give both the prefect of the Seine and the prefect of police a higher degree of stability in office than the minister himself, who is at the mercy of every shifting mood of the Chamber.

The police force as organized in 1854.

The ordinary or municipal police service of Paris was modeled in 1854 upon the metropolitan police system of London. At that time there were in all Paris only four hundred and fifty policemen assigned to patrol work. Three hundred other members of the municipal service had special duties to perform. The city was kept in hand by military rather than police control. Small garrisons of soldiers were distributed everywhere throughout the metropolis. The Emperor wisely determined to remove most of these objectionable squads of soldiery, and to create a police force similar to that of London. The number of ordinary policemen — then called *sergents de ville*, and afterward, as now, entitled *gardiens de la paix* — was at once multiplied to nearly three thousand. Under the police prefect was appointed a chief of the municipal police service, and under this chief were head officers for each arrondissement. A central post or police station was established in each arron-

dissement, and a sub-station in each quarter. The police force for every arrondissement was divided into three brigades, and each of these was further subdivided into four sections corresponding to the four quarters of the arrondissement. The three brigades were arranged upon the principle of an average active service of eight hours a day for each brigade and for each individual policeman. Each quarter was further subdivided into *îlots*, or beats, and it was a part of the plan to assign the same policeman always to the same beat, in order that he might know thoroughly his little circumscription. At night two policemen were to make their rounds in company, and thus to guard two adjoining îlots. From time to time the number of patrolmen was increased. On the extension of the municipal limits in 1860, the police force was fixed at 4616 active men. The number became 5768 in 1867. After the war, in 1871, the military régime was promptly abandoned in favor of a reorganized police force of 7756 men, which is now nearer 9000. There has been no material alteration in the practical workings of the system. Its recognition of the distinct and permanent character of the arrondissements and of the quarters as local divisions adds much to its value to the citizens on the one hand and to the higher authorities on the other.

Patrol system.

Numerical strength of the force.

The honesty and faithfulness of these policemen are matters of common testimony. The discipline of the service is strict and the duties are arduous, while the pay is exceedingly modest. Nevertheless, there are thirty or forty candidates for every vacancy; and the places are filled with young men who must be at least twenty-one years old while not more than thirty, and who must pass thorough examinations to test their physical, intellectual, and moral fitness. Once admitted on probation, the novitiate is sub-

Discipline of new men.

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jected to severe training for a number of months before he is allowed to appear alone in uniform as a gardien de la paix. In this period of tutelage he has been obliged to master thoroughly the laws, rules, and regulations that affect his duties; and his discipline includes military drill, gymnastic exercises, and whatsoever else is thought likely to make him a more valuable public servant. He is taught fidelity to duty, and is warned that to take the smallest bribe or gift may cost him his place and deprive him of his prospect of a pension. After twenty-five years of service, he may retire upon a pension that will suffice to keep him in decency for the rest of his life.

The period of tutelage.

Such a police system as I have thus described is familiar enough, as regards its *modus operandi*, to the denizens of all large English-speaking communities. I am inclined to believe, however, that the Parisian organization identifies the individual policeman more permanently and closely with a particular neighborhood than is customary in any American city, and that there is some advantage in this fact so long as the gardien de la paix is indeed upright and faithful, terrorizing evil-doers, befriending the unfortunate and helpless, and fulfilling in all respects the mission which his title implies.

The "gardien's" long tenure of his "beat."

But there belongs to the police service of Paris another localized institution which is at once peculiar and highly interesting. I refer to what is known as the commissariat. In every quarter of Paris there is established a functionary known as the police commissary. He is a man of legal education as well as of experience in police affairs. He exercises an authority which would suggest, to an American or an Englishman, now a justice of the peace, now a police judge, now a coroner, now a sheriff, now a truant officer, and now a censor of public morals. The com-

The police commissary.

missary's office is said to be a survival from very ancient times, when his lineal antecedent was chosen by the people of each parish as an arbiter in neighborhood affairs, and a dispenser of ready justice in cases of petty offense. He is now an appointee of the government, and practically, if not nominally, a creature of the police prefect. Nevertheless, he has the presumption of stable tenure, and is appointed after competitive examinations which are intended to make certain his fitness for the peculiarly discretionary business that comes before him. Such is the sphere of his tasks that he contributes, perhaps more than any other official, to the bringing of government and administration home to the people in their very neighborhoods. When an arrest is made by a policeman he must proceed at once with his prisoner to the nearest commissary. The routine work of the commissary's office is in charge of a secretary, who must be an intelligent and experienced man, and who is himself in the line of promotion. He is further assisted by several inspectors, who are ready men equal to clerical office duties, and also capable of such outside work as serving papers or otherwise representing their chief, the commissary. It should be understood that the commissary is not a judge in the true sense, and that his function in cases of crime or misdemeanor is a preliminary one. He makes inquiries, commits to a place of detention, and makes prompt and full report to the central offices of the police prefecture. The patrolman, through his direct superiors at the arrondissement post, also makes his independent report, and the case is thus passed along to the criminal courts to be dealt with in accordance with the established procedure. It is easy to see that the resort to a commissary, which is prompt and imperative, is at once a safeguard to the citizen and a relief

Once a neighborhood arbiter.

Now an intermediary between the police and the law courts.

Must sanction every arrest.

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to the patrolman making an arrest. A commissary is always present at every performance in every theater. One is always on duty at the Bourse, and several others are specially deputized to serve the public convenience at points where men are wont to gather in large numbers. Thus, in case of any disorder or disturbance the policemen on duty may instantly bring the person accused of an offense before a functionary whose capacity is essentially magisterial. If the accused person is to be detained for trial, it will be upon the order of the commissary, whose business it becomes to prepare the complaint for the trial judge. The relief thus afforded to the ordinary policeman is obviously of a kind which tends to promote rather than to diminish his efficiency. In matters of family dispute, and in petty contentions of many kinds, the commissary is readily accessible for informal services that make him an invaluable promoter of the neighborhood well-being, especially when he happens to add common sense and kind-heartedness to his exercise of authority.

Ubiquity of the commissary.

Besides the local or arrondissement service of the police, there are a number of central brigades assigned to duty in special ways — to markets, parks, and public buildings, to oversight of cabs and carriages, to inspection of lodging-houses, to various inquiries and investigations, and finally to detective work. Moreover, the indoor organization of the various bureaus of the central prefecture, with the marvelous system of records touching the personal history or the movements of hundreds of thousands of people, is not to be forgotten. As an administrative structure, the police system of Paris must arouse the admiration of all who study it, whether they approve or not in all respects. The so-called Parisian *police des mœurs* is entirely distinct, in its organization and work, from the patrol system; and apart from the maintenance of a state of

Other branches of police service.

good order and decency on the streets and in public places, the ordinary policeman of Paris is not concerned with those phases of the life of great cities which have in American cities so frequently involved the corruption of police departments.

Evolution of new departments.

It is interesting to note the differentiation of public services and functions, as municipal life attains the higher stages of development. Thus, one by one great municipal departments have grown out of what were originally the mere incidents of police administration. One of these incidents was street lighting. What we call health administration — now one of the most important separate departments of city government — was everywhere at the outset a very subordinate detail of the police branch. It is not difficult to understand how the illumination of streets and public places should have been first undertaken rather to assist the police in preventing crime and disorder than to promote merely the convenience of the citizens. Under this theory, the control of public lighting in Paris remained in the hands of the prefect of police until about the year 1860, when its natural evolution had reached such a stage that the police idea had been completely outgrown. It was then transferred to the general sphere of the prefect of the Seine, and to the particular management of the director of public works, in whose great systematic department it became coördinated as one of a series of engineering services. The immense transformations of the Haussmann period had fairly begun, and a new era had been entered upon for all the services which, like that of public lighting, bore relationship in some way to the street system.

Public lighting originally a police measure.

Transferred to director of public works in 1860.

Like American cities, and in this respect wholly unlike those of England and Germany, French cities have been disposed to leave the manufacture and sale

Gas supplied by private companies.

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of illuminants to private companies. But the resemblance between French and American cities as regards their dealings with this important service ends abruptly with the simple fact that they have chosen to employ private instead of public initiative. Paris in its dealing with lighting companies has always fully guarded the interests of the municipality and the citizens. American cities have been slow to learn the elementary lesson that there can be no real competition between gas companies in the same area, and that it is altogether futile to attempt to regulate by competition a business that is monopolistic in its very nature. Paris, before 1850, in the experimental period of public gas-lighting, had seven or eight different gas companies. But each was restricted to its own district; each was chartered upon terms that gave the city authorities large control; each furnished its quota of gas for street lights and public buildings at a price fixed by charter contract and approximating actual cost of manufacture; each paid a moderate street rental for the privilege of laying pipes under the sidewalks; each accepted a scale of prices for private consumers arranged, by agreement with the city, upon the basis of reports made by commissions composed of scientific authorities and experts; each submitted to a daily official examination of the quality of its gas and to penalties for failure to reach the standard, and each laid its pipes in its respective territory under strict regulations respecting injury to the pavement and disturbance of traffic. All these matters involved very much discussion and no small difference of opinion; but all were from time to time adjusted in an equitable and enlightened way.

Municipal regulation of gas supply.

The six companies which for some years had been engaged in the distribution of gas to Paris were fused into one great company in 1855. Some of our Amer-

Fusion of gas companies in 1855.

ican cities have in recent years been well-nigh convulsed with excitement and indignation because their local gas companies had been consolidated or brought under a unitary management. And yet it ought to be perfectly obvious that a consolidated gas supply can be more economically produced and sold. The fusion of the Paris companies in 1855 was effected only after several years of negotiations between the companies and the government, and it rested upon a basis carefully prescribed. The results were highly beneficial to all parties concerned. In 1861 a fusion was accomplished between the Parisian gas company and the smaller companies that had supplied the suburban districts, Paris having meanwhile annexed the outer belt of arrondissements and given the city its present area, with the engirdling fortifications as the municipal limits.

Suburban companies absorbed in 1861.

In 1870 the charter of the gas company was renewed and revised, and was placed upon a basis that still exists, and that will hold good until 1910. The contract might have been studied with great advantage in this country; and even now, after the lapse of decades, it is a more enlightened and satisfactory arrangement than any that has been made by large American cities. The capitalization of the company was fixed at 84,000,000 francs. The quality of the gas and the method of testing are prescribed. Pipes must be laid each year wherever the public authorities determine, and their removal, alteration, replacement, etc., are all subject to the order of the authorities, at the expense of the gas company. There must be two lines of piping along each street that is fourteen meters or more in width, and along each street that is paved with asphalt, no matter how narrow. It is arranged that the company shall pay the city 200,000 francs each year for the right to lay its pipes under the

Terms of the existing franchise.

Payments to the city.

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sidewalks. In lieu of an octroi tax upon the coal consumed in making gas, the city receives 2 francs for each 100 cubic meters of gas consumed in Paris. The price of gas per cubic meter to private consumers is fixed by agreement, and the price to the city for public purposes is fixed at about half that which private consumers pay. The company is allowed, after paying fixed charges and placing a certain lawful sum in its reserve fund, to devote 11,200,000 francs of net profits to paying dividends upon its 84,000,000 francs of capital stock. All surplus earnings must be equally divided between the company and the municipal treasury.

Municipal treasury shares in surplus profits.

Financial aspects summed up.

The financial aspects of this charter can be briefly recapitulated. The company must furnish gas to individuals at a price not exceeding a fixed maximum. It must supply gas for public uses at what is practically the cost of manufacture. It must pay the city 200,000 (ultimately 250,000) francs a year for the right to pipe the streets. It must pay a tax of 2 francs per 100 cubic meters of gas supplied to Paris. Further, it must not "water" its stock, but must keep its capitalization at 84,000,000 francs, and after paying 13¾ per cent. out of net profits as dividends to the shareholders it must divide all remaining profits with the city. Finally, at the expiration of the charter, all rights revert to the city, which becomes also the owner of all the subways, piping, etc., that pertain to the plant.

Amount of the city's revenues from gas company.

The city's share in the profits has steadily increased until the receipts from the gas company have become a large item of revenue. In 1870 about 5,000,000 francs were received from the company. For the year 1875 the amount exceeded 8,000,000 francs. In 1880, 12,400,000 francs were received, and in 1882 more than 15,000,000. For several years past the annual pay-

ment of the gas company to the city has been approximately 20,000,000 francs. In comparison with American cities, this large sum is clear profit; for we do not in this country ordinarily obtain any public revenue from gas companies. As not less important, moreover, it is to be noted that Paris enjoys the further advantage of obtaining gas for public lighting at rates approximating the lowest actual cost of manufacture. Most American cities would congratulate themselves that they had made an extraordinary bargain if, in return for the privileges they accord to the gas companies, they should have the streets and public buildings lighted at cost. But Paris obtains that concession, and 20,000,000 francs a year in addition to it. Inasmuch as street lamps and various public establishments consume nearly one fifth of the total supply of gas in Paris, it is obvious that there is very substantial advantage in obtaining the public supply at cost. I would suggest that American municipal authorities might profitably take to heart the fact that in the past ten years the Paris gas company has paid into the city treasury 200,000,000 francs, or $40,000,000.[1]

Gas for public lights supplied at cost.

The inspection of gas manufacture, the testing of the quality of gas, the supervision of gas-fittings in all kinds of buildings, and the management of street and public lighting, belong to one of the bureaus of the department of public works, and come under general charge of an engineer-in-chief, who has under him a staff of nearly one hundred ordinary engineers and assistants. It is needless to say that this, like all other bureaus of the executive municipal government, is a model of efficiency. Paris, under its intelli-

Municipal engineers in charge of lighting service.

[1] Electrical competition, the cheapness of petroleum, and the consequent reductions in the price of gas, have since 1892 caused some falling off in the municipal revenue from this source.

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gent operations, became the most beautifully illumined of all large cities. Every detail of the service was brought under strict regulation, and there is the least possible ground for complaint against the gas company as a private monopoly.

The question of public ownership of gas works.

The question naturally arises whether the Paris plan is a wiser one than that of many great cities elsewhere in Europe which have assumed the gas manufacture as a public monopoly. Conservative Frenchmen decidedly prefer their own system, while the French radicals and socialists have begun on doctrinaire ground to demand that public ownership and operation of gas-works which the English and German cities from a wholly different point of view, have adopted as a piece of thrifty municipal financiering. I am inclined to the opinion that the largest possible use of gas, like that of water, is to be obtained under a system of public ownership, and that this large use is so desirable in a city as to justify direct municipal administration. That the poor people of Paris could be provided with gas both for light and for fuel at a lower rate than they are now obliged to pay, if the municipal government were to supersede the existing company, seems to me to be indisputable. However, the present system is so good that there is comparatively little reason to desire a radical change.

A social rather than a financial question in Paris.

Gas-lighting was first introduced in England, but Paris followed in good time and with a splendor unequaled elsewhere. In like manner, America, Germany, and some other countries have been earlier in the use of electric lighting; but the Parisians, with their superior taste and skill in all matters of municipal arrangements and appointments, seem destined to make in the end the most complete and attractive use of the new illuminant. In 1878, at the time of the universal Exposition, the municipal government

Beginnings of electric lighting.

ordered the experimental illumination of the Avenue de l'Opéra and several open spaces with electricity; but the new system was not ripe for large use, and the experiment was soon abandoned. Its principal effect was the stimulus it gave to the gas company, which invented and put into use certain large compound burners using 1400 liters per hour, and giving a most brilliant light. The great electrical improvements of the following decade, chiefly American, were exhibited in the French Exposition of 1889, and were studied with the utmost care by the Parisian authorities and municipal engineers. Undoubtedly the displays at the Exposition had a most pronounced effect in stimulating the new zeal Paris has since shown for the appliances of the electric age.

Effects of competition.

The manner in which Paris has proceeded to introduce electricity in every portion of the municipal area is of the utmost importance to all other cities that have to do with similar problems. There has been no undue haste. On the contrary, the subject has been treated in a patient, scientific, systematic way. To begin with, the municipality spent 2,000,000 francs or more in making a central electrical installation of its own in the basement of "Les Halles Centrales," the great central market of Paris. This plant is conveniently situated for the illumination of a number of public buildings and establishments, and it can be enlarged indefinitely. But it has never been intended to use this or any other municipal installation for the general work of lighting the city. It is for experimental purposes, and also for the purpose of acting as a regulator of charges. It enables the municipality to command the situation, and gives it a corps of men who understand the practical details of an electrical establishment. For the purposes of general illumination the city has been divided into seven

The central installation.

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City divided into "secteurs électriques."

"secteurs électriques." Paris is approximately a circle, and the secteurs are segments the dividing lines of which radiate from the vicinity of the Halles as a center and extend to the circumference. Each of these secteurs was granted exclusively, for a short term of years, to a responsible electric company. Thus, Edison was accorded one, the great Paris contractor Victor Popp (using the Thomson-Houston system) obtained two, and the others were conceded respectively to the Messrs. Rothschild, the Société Alsacienne, the Ferranti Company of London, and Naze & Co. (representing the Westinghouse system). Several of the secteurs were granted in the latter part of 1890, completing the distribution. As one of the conditions, it was required that the companies proceed at once to make their installations, and that within two years their districts should be completely served with main cables. Thus, before the end of 1892 it was expected that such provision would have been made that, if desired, every street in Paris, as well as every house, could be illumined with electricity. It was required that the companies should supply street lighting upon terms as favorable as possible,—at cost or even less,—and a maximum rate of charge to private users was prescribed. Each company was required to give a guaranty fund of several hundred thousand francs to insure the fulfilment of all the conditions imposed in the concession. No payment was required for the charters, the terms being short, and permanent arrangements being deferred until use could be made of the results of five or ten years' experience. Meanwhile the city had its own central plant, and was not debarred from laying its cables into any or all of the secteurs, with a view to regulating prices by competition. Thus, Paris seemed to have prepared the way for a more com-

Grants to various companies.

Conditions of grant.

Advantageous position of municipal authorities.

plete supply of electric-lighting facilities than any other large city in the world. The process of transformation has not been as rapid as was expected, and except on the boulevards and a few central avenues and squares, the displacement of gas by electricity had not in 1895 been very conspicuously accomplished. But if the companies have gained some postponement of the time limits within which their districts shall be completely cabled, the city in its turn has exacted a yearly street rental of 200 francs for each kilometer of cable, besides imposing the lucrative tax of five per cent. on the gross receipts of the companies.



Money payments by the companies.

It should be noted that the question how to dispose of wires — a question that has made so continually recurring an agitation in all American cities — never comes up at all in Paris, and is seldom mentioned in any European city. There are absolutely no obstructive wires in Paris. The government has purchased the telephone as well as the telegraph system, and all the wires for these services are placed in the subways or sewers. The wires of the electric-light companies are buried under the sidewalks. Armored cables are laid in simple conduits, or even in the bare soil, without the slightest difficulty from any point of view. In crossing streets it is forbidden to break the paving, and underground connection is made from the manholes of the sewers. The whole city of Paris will have been laid with a network of electric-lighting cables, and traffic on the sidewalks and in the streets will have suffered a minimum of obstruction, while no injury whatsoever will have been done to pavements. Many of these minor questions of practical municipal engineering that our American cities too often attack in a fumbling, rude, original way, heedless even of the experience of near neighbors, while densely and contentedly

Wires in subways or sewers.

European superiority in engineering details.

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ignorant of the experience of foreign cities, have been thoroughly solved in Europe. Instead of leading the van, America has lagged from ten to fifteen years behind Europe in these matters. Even in our own field of electrical methods, as a prominent American electrician once assured me in Paris, we are five years behind the Continent. He declared that the difficulties our American corporations still complain about when asked to bury their telegraph, telephone, and lighting wires, were all met and vanquished in Europe several years ago, and that our fellow-countrymen insist upon remaining in a state of invincible ignorance rather than learn from the technical and scientific achievements of Europe. But perhaps he stated the case too strongly. Doubtless we shall in time come to a realizing sense of the fact that the one city of Paris has at its command a larger and more brilliant array of engineering and architectural talent than all the important cities of the United States taken together can show, and that many a small European town is better supplied in this respect than many a large American city.

The testimony of an American electrician.

The street system — the *voie publique* — keeps its place at the very heart and center of Parisian administration. The French capital has unflinchingly accepted the doctrine that smooth and clean highways are a wise investment from every point of view; and that so long as the work is done in a thorough and scientific manner, with an honest and skilful application of means to ends, the result is worth having, regardless of cost. The expense of maintaining, cleaning, and sprinkling the streets is vastly greater per capita in Paris than in almost any other European city; but the sort of preëminence that such a street service helps to secure is profitable in a hundred indirect ways.

The streets as a primary concern in Paris.

The service of the voie publique includes street-making and paving; the care, repair, and maintenance of the streets and sidewalks; and the sweeping and sprinkling of the streets, together with the removal of the street sweepings and of domestic garbage. As a branch of the department of public works, this task of street maintenance and cleansing is placed in charge of two engineers-in-chief, to each of whom ten arrondissements are assigned. The twenty arrondissements are further grouped in sections comprising two or three arrondissements. In the execution of the work, the paving and the cleansing are kept distinct from each other. A large number of the national government's engineers from the famous *corps des ponts et chaussées* are always assigned to the Parisian public works and placed at the disposal of the director; and employed with them are many engineers belonging primarily to the municipal service. The cleansing organization is as completely manned with these highly trained technical experts as is that of paving, lighting, parks, water-supply, or sewerage.

Organization of paving and cleansing.

The annual outlay under the general category of the voie publique reaches approximately twenty-five million francs. For a number of years the national treasury has contributed a fixed yearly subsidy of four million francs, and the department of the Seine has contributed one tenth of that amount, in accordance with the theory that the chief thoroughfares of Paris are to be considered as the continuation of national roads and departmental highways. In the original paving of a Parisian street, it is the rule to assess most of the cost against the owners of abutting property. In the case, however, of a great avenue or boulevard having exceptional width, the owners of frontage pay only for a strip of perhaps ten or twelve meters on either side, and the rest of

National subvention for Paris streets.

Paving assessments.

the cost is borne by the municipal treasury. Once added to the list of paved thoroughfares, a street becomes a public charge, and the repair and renewal of the paving are undertaken at the expense of the whole city.

Materials used in street making.

A remarkable degree of uniformity and of perfection has been attained in the general condition and appearance of the pavements of Paris, although a variety of materials has been used. The area of asphalt surface increases year by year, while carefully cut and evenly placed stone blocks still constitute by far the largest portion of the paved streets. The municipality works its own quarries for a large proportion of the paving blocks that it uses, and also for the rough stone needed in road- and street-making. When wood paving had been quite generally abandoned in American cities as a failure from every standpoint, the Parisian engineers had begun to demonstrate the excellences of this American invention, with the consequence that the extent of smooth and noiseless wood-paved roadways, so much cheaper than asphalt and so much safer for horses, has been rapidly increasing.

Success of wooden pavements.

The success of wood paving in Paris has been due in part to a favorable climate, but most of all to the fact of thorough and scientific workmanship, after careful testing of different woods and different methods of treatment, chemical and mechanical. Experiments made until about 1882 were disappointing. But an English company at that time offered an improved process, and agreed to assume all the risks of failure. Accordingly, this company (afterward transformed into a Franco-English company with headquarters at Paris) obtained concessions for the paving of a number of the most important streets, including the Avenue des Champs-Élysées, the Rue

Terms of paving contracts.

Montmartre, the Rue de Rivoli, the Avenue de l'Opéra, and the Boulevard Poissonnière. Under this arrangement the company agreed to construct the pavements on a proper cement foundation, and to keep them in perfect repair for a term of years, receiving in payment an annuity of about two and a half francs per square meter for the original cost, and a further annuity of similar average amount for keeping the pavement in good condition through the period of the contract. From the opening of 1883 to 1894 a number of these agreements were made, applying to different streets or portions of streets, and eighteen years was the contract period for which most of the work was taken in hand. In their wise protection of public interests, these paving contracts furnish a characteristic example of the methods of the Paris municipality in its dealings with private corporations and concessionnaires. Having made its investment, the company's reimbursement was to take the form of eighteen equal yearly instalments, with the certainty of forfeiture of all outstanding sums if the paving were not kept in a satisfactory condition up to the very end of the eighteen-year term.

Public interests guarded.

Meanwhile the officials and engineers of the voie publique have learned precisely what it costs to lay and repair wooden pavements, and how long they may be expected to wear in different classes of streets. They have accordingly found it advantageous to construct such pavements without the intervention of a contracting company. In 1895 Paris had perhaps forty miles of wood-paved streets, of which about one third were under direct municipal management, while two thirds were maintained under contracts which will expire in the years from 1901 to 1905. It should be said that the maintenance of the greater part of the asphalt paving of Paris is

Future policy in construction of pavements.

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also in the hands of contractors who have assumed the risks for a term of years, although the administration has now begun to lay its own asphalt, the experiment having been satisfactory. Few cities understand as well as Paris how to make this advantageous temporary use of the private *entrepreneur*. As regards both asphalt and wood, it has been clearly demonstrated that the engineers of the voie publique can keep the pavements in good condition for much less money per square meter than is paid to the contracting companies for maintenance. Consequently, there can be no question as to the permanent policy.

Contract system superseded.

A limited portion — perhaps fifteen per cent. — of the Paris street surface is macadamized. But no other portions are more skilfully maintained; for the making of good roads is one of the notable accomplishments of the French engineers in the public service, and the "metaled" or macadamized roadways of Paris are models of their kind. In 1894 they gave employment to a regular force of about thirteen hundred workmen, and to a great number of horses and carts engaged in transporting materials.

Macadamized Roads.

There is some indication of thrifty management in the fact that the service of macadamized roads, which is an extensive keeper of horses, is able to supply the street-sweeping service, during several hours each day, with the teams required for two or three hundred sweeping-machines. It is also in position to furnish numerous teams for the sprinkling-carts. The cleansing service pays the macadamized road service an agreed amount per hour for each team, and the transaction is obviously economical. It enables the cleansing department to use a large number of teams for a fraction of the day, without obliging that service to pay more than a proportional share of the cost of the horses and their drivers.

An instance of coöperation.

The macadamized road service manages its own street cleaning, scavenging and sprinkling; but for the rest of Paris, including all the paved streets and squares, the cleansing work is distinctly organized, and has been brought to an efficiency which makes it quite as noteworthy as any part of the Parisian municipal housekeeping. From very ancient times it was the law that each owner or occupier of property should sweep his share of the street. The rules were enforced by the police. When the modern street reforms began in earnest in 1853, new rules were promulgated requiring thorough daily cleansing of all public ways. But the sweeping of squares and of the middle strip of broad avenues devolved upon the city itself; and as standards became more fastidious the public task grew larger. At the time of the extension of the municipal limits in 1860 the entire charge of street cleansing was transferred from the domain of the prefect of police to that of the prefect of the Seine, and it was assigned to the engineers of the voie publique under the general control of the director of public works. Gradually individual owners began to adopt the plan of making a money payment and allowing the administration to cleanse their portions of the street. In 1873 the department found itself actually performing half of the cleansing of Paris, and it was evident that the best results would be gained by a uniform municipal service. Accordingly, a law was enacted transforming the citizen's old-time obligation into a direct money tax. The streets were minutely classified according to their character, and a schedule of charges was made out, which is subject to revision every five years. It is intended to keep the tax down to the actual cost of the service.

The cleansing department.

History of street cleaning.

Establishment of full municipal service.

In the work of cleansing and watering the streets of Paris nearly five thousand persons are constantly

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The street-cleaning army.

employed. The number would be much greater but for the fact that several hundred sweeping-machines do the work that otherwise would require the services of at least three thousand additional hand-workers. The great triumph of the Paris system is its complete and simultaneous collection and removal at an early hour every morning of all detritus and domestic waste throughout the entire metropolis. Between four o'clock and half-past six the entire paving of the city, including sidewalks, roadways, gutters, open squares, alleys and courts, has been swept by machine and by hand, and much of it has been scrubbed and disinfected, while many smooth streets also have been sprinkled with clean sand to prevent the slipping of horses. At half-past six the teams begin to remove the heaps of detritus, and also to collect the garbage that has been placed on the sidewalk in special receptacles in front of every house. By half-past eight at the very latest the collection and removal is at an end, the empty garbage receptacles have been cleansed and disinfected and have disappeared from the sidewalks, and the main task of the cleansing department has been performed for the day. But the army of street cleansers—organized in perhaps 150 bands of twenty or thirty persons, with a sectional *atelier*, or headquarters shop, where each band reports for duty—is kept steadily at work. Before eleven o'clock the gutters have been scrubbed, and much other work in detail has been performed, while immediate removal of all fresh litter or manure from the pavements is required. Meanwhile, except in unseasonable weather, the sprinkling of the streets has begun, partly by means of wagons, but largely and to a fast increasing extent by the use of small stationary devices somewhat resembling the ordinary lawn or garden sprinkler, thousands of which are attended by the em-

Complete cleansing every morning.

The order of the day.

Sprinkling the streets.

ployees of the street-cleaning department. In the afternoon the sweeping-machines are again at work on the more frequented thoroughfares, and the sidewalks are again carefully swept by hand in such a way as to avoid raising the dust, while the processes of scrubbing and sprinkling and flushing and disinfection are unsparingly applied to pavements, gutters, and public lavatories.

Garbage removal.

The removal of garbage and street sweepings is performed by contract. The administration divides the work into a number of sections, and thus obtains the services of small contractors. The object aimed at is the utilization of the farmers and market-gardeners in the immediate vicinity of Paris, who are enabled to participate in the contracts. Nothing would seem to be more natural than a system by which the gardeners who bring supplies to the city should remove the garbage and sweepings on their return trips to the country, and should use the material for fertilizers. If such a system were haphazard in its working it could not be tolerated; but under the supervision of the official engineers and inspectors of the cleansing department, a remarkable state of completeness, uniformity, and methodical efficiency has been secured. In view of all the local circumstances, it is hardly possible to see how anything could be gained by an abandonment of the contract system. The contract applies only to the driver and team, the city itself providing the labor that loads the cart, and directly supervising and controlling every detail.

Employment of market-gardeners.

Removal of snow.

The removal of snow and ice from Paris streets is a special service for which elaborate emergency rules exist. The police department coöperates with the forces of the voie publique, and the householders are also under obligations to assist. Temporary

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employees are added to the regular cleansing force, sometimes to the number of ten thousand or more; and thus at least fifteen thousand men will be engaged in shoveling and removing snow. In the final disposition of snow, much use is made of the huge trunk sewers.

Importance of public cleansing.

If I have dwelt with some elaboration of detail upon the public cleansing work, it has been solely for the purpose of making plain the exceedingly great importance that Paris attaches to this branch of administration. I have scarcely hinted at the perfection of the utensils, the magnitude of the "plant," and the infinite painstaking and trained skill that make the technical aspects of the work so creditable and also so interesting. Without this ministry of public cleansing, modern Paris would not be itself. It enters into the whole life of the people, rich and poor alike.

Water-supply and sewers.

In the great programme of the Napoleon-Haussmann period a new water-supply and a system of sewers were included as highly essential features of the modernized Paris. The provision of water for public and private use, and the creation of ample drainage facilities, were recognized as kindred municipal functions, primary and vital, and they were united under the charge of a *directeur des eaux et égouts* (director of waterworks and sewers), his department forming one of the bureaus of the general department of public works, and having a position coördinate with that of the voie publique. The history of the Paris *Eaux et Égouts* is a valuable one, of which the most instructive chapters are the most recent and the least known. It is under the present republic, and not under the third empire, that the most important results have been attained in the perfection of these services. However, the later ac-

complishments cannot be understood except in their relation to earlier plans and achievements.

Beginnings of Parisian waterworks.

Royal and municipal authority for several centuries had given some concern to the water-supply of Paris; and although at the beginning of the nineteenth century the entire amount provided daily did not average more than fourteen liters per inhabitant, it may be said that the Paris arrangements were in advance of those to be found in other European cities. The impulse of the great Revolution led, however, to the undertaking of the largest water-supply project of those times. This was the construction of the Canal de l'Ourcq. The little river Ourcq is a tributary of the Marne. Its connection with Paris by a canal had for centuries been discussed, as a means for bringing the capital into navigable communication with a system of waterways in the north and east of France. In the first decade of the nineteenth century it was determined to construct this canal for the double purpose of navigation and water-supply. A great reservoir was provided in the northeast of Paris (Bassin de la Villette), the work was crowded with all possible expedition, and the new system was in actual operation at the end of 1808. It was not on account of sanitary objections to the water of the Seine that the Ourcq water was introduced by a canal some scores of miles in length, for the quality of the Seine water was decidedly preferable. It was because at that time the modern steam-pumping system was in its infancy, and although two or three steam-pumps had been set at work in the years from 1777 to 1782, the venture had not been very encouraging. The Ourcq Canal, on the other hand, reaches Paris on comparatively high ground, and can afford gravity distribution to most parts of the city. By extensions and added sources

The Ourcq Canal.

The Seine and the first steam-pumps.

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of supply, the capacity of the Ourcq Canal was largely increased from time to time, and it remained the chief source of supply when, in 1854, the new order of things demanded radical measures of relief.

Situation in 1854.

M. Belgrand, the distinguished engineer who was made the master builder of the new underground Paris, and who served for many years as head of the eaux et égouts, laid down in 1854 the principles of a new water system, making it harmonize with those of a new sewer system, each being the complement of the other. The existing water-supply was condemned as by far too small in quantity, and as unsuitable in quality. The nature of the surrounding country made it difficult to introduce a large supply from high sources that would meet requirements as to quality.

Belgrand's new system.

M. Belgrand was forced to conclude that for Paris the permanent solution must be found in a double system. The waters of the Ourcq and of the Seine could be carried through one system of pipes and used for street cleaning, sewer flushing, ornamental fountains, and various other public purposes, together with certain manufacturing and private purposes, while aqueducts from distant springs and mountain-built reservoirs could furnish a supply for drinking and strictly domestic purposes, to be distributed through a distinct ramification of pipes. The placing of the two systems of pipes in the sewer tunnels would facilitate their management. The great projects of broad, new boulevards, public gardens, tree-lined avenues, and general municipal renovation, would clearly make necessary an unprecedented use of water for public purposes. Indeed, it was evident that more would be needed for public than for private uses. An average daily supply of about eighty-five liters per inhabitant had been attained in 1855,

A double supply.

River water for public use, spring water for houses.

and it was desired by Belgrand, Haussmann, and their imperial chief to bring the amount up to two hundred liters at the earliest possible moment. To some extent the work on the new system could begin at once, although for the most part it must await the completion of the sewers.

Problems created by annexation.

The plans were approved and the work was entered upon. In 1856 Paris had in round figures 1,175,000 inhabitants. To this number there were added 500,000 in 1860 by the annexation of the suburban belt. Belgrand found his problem of water-supply and sewers enormously increased by the addition of so many people, and particularly by the more than doubling of his territory. Moreover, there was a private water company to deal with. Consolidation of two or three companies had brought the supply of the entire suburban belt within the control of a "Compagnie Générale des Eaux," with long-time franchises. This company was providing a shockingly unwholesome and insufficient supply at enormous prices to consumers. The amount supplied per capita was about one third that which had long been distributed within the old limits, and the price per cubic meter was about three times as high under private control in the suburbs as under municipal management in the city. It was obvious that the annexed districts would have to be placed on an equality with the inner arrondissements in regard to the supply of water, and the city had somehow to dispose of the company. A financial arrangement (which I shall explain in a subsequent paragraph) gave the public administration complete possession and control of the entire system.

The suburban water system.

The Seine water was at that time considered far more desirable for private uses than the Ourcq; and the first step taken for extension of supply was the

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New pumping-stations.

establishment of large new pumping-stations on the river banks, for the service of half the new territory. The other half, comprising the four outer arrondissements lying on the north and east, could not be easily supplied from the Seine. It was accordingly decided to furnish the quantity needed for public purposes by means of a pumping-station several miles distant on the river Marne, and to obtain the domestic supply through a long aqueduct to the sources of the Dhuis, about 130 kilometers (80 miles) east of Paris. The amount derivable from this distant source was not very large, but it could be relied upon as the final supply of domestic water for a considerable district of the metropolis. The work was completed in 1865.

The Dhuis aqueduct.

Temporary necessities having been met for the entire city, M. Belgrand and the administration began at once to provide for the future double service of the central arrondissements. The valley at the sources of the river Vannes, which could yield more than one hundred thousand cubic meters per day, was secured, and work was begun upon a great aqueduct 173 kilometers (107 miles) long. The Vannes sources, like those of the Dhuis, lie somewhat south of east from Paris. The Vannes aqueduct was not finished when war closed the imperial régime; but the work was resumed under the republic, and the Vannes water reached Paris in 1874. Subsequent improvements brought the daily yield of this aqueduct up to one hundred and twenty-five thousand cubic meters. From 1854 to 1874 there had been expended one hundred million francs upon works for the introduction and distribution of a Paris water-supply. It would be tedious to recount the details of reservoirs, pumping-stations, and general plant, comprising a distributive system that had

The Vannes aqueduct.

Completed in 1874.

The system in general.

undergone enormous improvements in the following twenty years. The Ourcq, Marne, and Seine had continued to furnish the great bulk of the supply, the tendency being to withdraw the river water at points more remote from contamination, and to give more attention to projects of subsidence and filtration. In 1892 the rivers were furnishing more than three fourths of the six hundred thousand cubic meters that were required every day.

More recent projects.

But the plan of an eventually complete domestic supply from distant spring sources, as laid down by M. Belgrand, had never been abandoned, and in 1886 definite steps were taken to secure an additional quantity of spring water. Another group of sources was designated in the east, near Provins, while westward, at the distance of one hundred and ten kilometers, was found a favorable spot near Verneuil, where the Vigne and the Avre have their origin in the hills, and where a system of dams and reservoirs could readily secure for Paris an average supply of one hundred and twenty thousand cubic meters daily of an exceedingly satisfactory drinking-water. Thirty-five million francs were set aside as the estimated cost of the works, and this great Avre aqueduct was finished in 1894, with the result of nearly doubling the amount of spring water that comes to Paris for domestic uses. In due time the new eastern sources will have been utilized, and the double system will have been carried out in an ideal manner for all Paris.

Completion in 1894 of great Avre aqueduct.

No other city uses water in so large a proportion of the whole supply for street and public purposes, and in no other great city would the circumstances so clearly point to the double system as an advantageous one. With numerous reservoirs, numerous pumping-works, and several distinct elements in the main sup-

A complex but harmonious system.

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ply, the department finds it possible to mix waters, to alternate, and to utilize in various ways a distributing plant that is remarkably adaptable. There is an enviable simplicity in the magnificent supply of Glasgow, which derives from one lofty and immaculate source an unbounded supply of the purest water cheaply enough to use it for all public and private purposes; and there is an admirable boldness in the new policy of Hamburg, which takes the filthy water of the Elbe, with one filtration plant reduces it to a purity almost equal to a distilled liquid, and from one pumping-station forces it everywhere throughout the city. But there is also something very admirable in the development of the Paris supply, which has adapted means to ends so elaborately, and which, with all its complexity, is approaching a very high state of engineering and sanitary perfection. In the forty years from 1856 to 1896 there will have been expended upon waterworks by the Paris municipality an amount approaching two hundred and fifty million francs.

Cost of waterworks.

The arrangement by which the municipality obtained control in 1860 of the water-supply of the annexed zone was a peculiar one. The Compagnie Générale des Eaux made over to the city all its property and rights, and was installed as the city's collecting agent and intermediary in all dealings with private individuals. The company was given a fifty years' interest in the proceeds of the water business, its charter running from January 1, 1861, to January 1, 1911. The company has nothing to do with the fixing of the rentals or price schedules, and no voice, however feeble, in any question having to do with the supply. From time to time the municipal authorities readjust the scale of charges, and determine the rules and regulations. The company makes house

A company as collecting agent.

connections, and attends to the domestic details. It is allowed a commission of twenty-five per cent. upon its collections in excess of three million six hundred thousand francs up to six million — that is to say, a commission of one fourth upon two million four hundred thousand francs. Its percentages grow less as receipts increase. Upon the seventh, eighth, and ninth million francs its commission is twenty per cent.; upon the tenth and eleventh millions it is fifteen per cent.; upon the twelfth it is ten, and upon all collections in excess of twelve million francs it is five per cent. Thus, the receipts from private consumers having reached, let us say, fourteen million francs in 1895, the company's aggregate commission would be one million seven hundred thousand francs. The company's interests naturally make for vigilance in collections; and the scale of charges is so arranged that the company, though not directly affected by the cost of supply, is an active opponent of waste. The best quality of water has always been scarce enough in Paris to inculcate a gaged and measured economy in its distribution that has perhaps at times sacrificed the social to the commercial aspect of a water-supply. But the prices charged to the poor are not very high, though they are not so low as English and Scotch prices. The lowest annual water-rate in Paris is twenty francs a year, based upon an estimated average consumption of one hundred and twenty-five liters a day. In view of the conditions under which, in 1860, the company was accorded its present functions, it cannot be said that its capital of twenty million francs is unduly remunerated at the public expense; nor do its services seem to be otherwise than meritorious and efficient. Its collections in gross are paid into the public treasury every week, and its commissions are repaid to it at

Terms of the contract.

Scale of water-rates.

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Ultimate fate of the company.

stated intervals. It is hardly probable that the city will find any sufficient reasons for continuing to employ the company after the year 1910.

It may be added that the company has no concern whatever with the system of pipes that distribute water for public uses, and that the municipality derives some income from non-municipal institutions which use water for public purposes. The municipal revenue that accrues from private users easily pays interest and sinking-fund charges upon all that is invested in the water-supply system, together with all the costs of maintenance and operation, and leaves some surplus profit. The chief municipal benefit, obviously, lies in the free use of half or more of the entire supply for the public service of streets, parks, sewers, fire hydrants, and the like.

Free supply for public purposes.

A certain type of French fiction has given many readers the impression that the famous sewer system of Paris possesses considerable antiquity. In point of sober fact, very little had been done in the construction of that system before 1860. Open ditches had served all purposes of Paris drainage until 1750, when a little stream into which many of these ditches had emptied their foul waters was covered over, chiefly in order to make more building space. Gradually it came to be used as a trunk sewer, and a number of covered ditches were subsequently drained into it. But this was not a modern sewer, and not until 1851, in connection with the making of the Rue de Rivoli, was a modern main sewer tunnel built, its point of discharge into the Seine being just below the bridge at the Place de la Concorde. Meanwhile a number of small street sewers had been conducted directly into the river, and the waters and banks were becoming most seriously polluted.

Early drainage system.

First modern sewer in 1851.

At this time M. Belgrand devised his magnificent

plans for the drainage and water-supply of the transformed Paris, and in 1856 his scheme for a network of sewers was adopted, and he was authorized to begin construction. Several years had elapsed, however, before much actual work had been accomplished, and in 1860 the annexation of the suburbs gave the task a larger though not a different character. The topography of Paris suggested three great trunk sewers, or *collecteurs* (as Belgrand well called them), which should have capacity to carry off the aggregate outflow of the entire sewerage network, and which should empty it all into the Seine at some distance below the city. One of these collecteurs was designed to intercept the sewers that approached the river on the north or right bank, and to serve the central parts of Paris. A corresponding one, following for some distance the left bank of the river, was given such dimensions as to be able to receive the flow of the entire ramification of sewers south of the Seine. A third collecteur, at a higher level, was designed to carry off the rainfall and ordinary sewage of the more elevated arrondissements of the northeast part of the city.

New system adopted in 1856.

The great trunk sewers

These three huge trunk sewers, opened by Belgrand, have remained the basis of the system, although since his time a number of additional secondary collecteurs of formidable size have been built, and the network of street sewers has been doubled in extent, while great improvements in the operation of the system have been inaugurated.

The collecteurs are great subterranean galleries of arched masonry, shaped like a horseshoe, with a diameter of not less than fifteen feet, and in some cases nearly twenty feet. The sewage ordinarily flows in a deep gutter at the bottom, with a footpath projecting on either side. This gutter has an

Forms and dimensions.

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average depth in the great mains of four or five feet, and the footpaths are from twenty inches to two or three feet wide. The ordinary street sewers are egg-shaped, elliptical conduits, with a vertical diameter of about six or seven feet, and with the small end of the ellipse at the bottom. As a rule, there is a projecting footpath on one side, at twelve or fifteen inches from the bottom. According to the law of 1856, when the system was instituted, every street of less than twenty meters' width must have one of these sewers under the center of the roadway, while every street of more than that width must have two, one being under each sidewalk. The sewers are of different sizes and proportions according to the varying circumstances, and are classified under fifteen types. They have been planned not merely to carry off the drainage from streets and houses, but also to serve various subway purposes to which I shall refer hereafter. It was about the year 1881 that the sewer system, the development of which had been interrupted by the war in 1870, was taken in hand again with extraordinary energy. In no other way can the vast amount of new work be so well appreciated as by study of a sewer map, showing in one color the lines that had been constructed before 1880, and in another color those that have since been completed. The mileage of well-built conduits seems to have increased by at least one hundred per cent., and the recent work pertains to every locality in the metropolis.

Recent development.

Just before the outbreak of the war of 1870, Paris had begun in a small and tentative way the experiment of sewage disposal by means of irrigation. The spot chosen was in the plain of Gennevilliers in the great bend of the Seine north of Paris, this region being in the general direction of the outfall

The sewage-farm at Gennevilliers.

point of the collecteurs, and possessing various advantages of soil and topography. The experiment grew by degrees until in 1892 there was an area of eight hundred hectares (2000 acres) under actual irrigation, and thirty million cubic meters of sewage per annum was purified by natural filtration. The tests of the laboratory, moreover, showed that the affluent passing from the Gennevilliers drains into the river contained scarcely a dozen microbes to the cubic centimeter, whereas the pure Vanne drinking-water contained 62 per cubic centimeter, the Seine water at the Bercy pumping-works contained 1400, and the unpurified sewage itself contained 20,000. The Parisians are now thoroughly converted to the theory and practice of sewage disposal by means of land irrigation, and are greatly extending the system of sewage-farms. They have obtained from the general government a portion of the St. Germain forest, which lies five miles west of the city limits, in one of the series of immense horseshoe curves which the Seine describes after it leaves the heart of Paris. The large plans upon which the administration has entered have led to the expectation that the close of the year 1900 may witness the treatment of the entire volume of Paris sewage by means of irrigation. The Gennevilliers experiment has been brilliantly successful from the agricultural point of view, the crops having been quadrupled, while the population of the neighborhood had nearly doubled in ten years, and the community was a model for healthfulness.

Complete purification.

A new sewage-farm in the St. Germain forest.

There remain to be set forth certain changed conditions which give the problem of sewage disposal a new importance. The Paris sewage has hitherto held a comparatively small amount of solid matter in solution. Its discharge into the Seine has on that account been the less objectionable. From times

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The fosse system.

immemorial every house in Paris has been provided with its *fosse*, or vault, for the reception of fecal material. When Belgrand entered upon the construction of the new sewer system, he favored the adoption, so far as possible, of a direct discharge from water-closets into the sewers. But, unfortunately, not many of the existing sewers had a sufficiently steep fall, and many difficulties were in the way. The fixed pits, or fosses, had at an earlier period been a frightful source of danger, disease, and death; but great improvements had been introduced, both in their construction and in the methods of emptying them, which had lessened their evils quite appreciably. The *vidangeurs*, or night-men, who emptied the cesspools, were licensed and brought under the strictest public regulations. The material was conveyed in air-tight receptacles, and carried to several great depots, where it was converted into an inoffensive dry fertilizer.

The vidangeurs.

Many Parisians contended that this system of *fosses fixes* was more to be desired than the opposing system known as that of "*tout à l'égout*" ("everything into the sewer"). But tout à l'égout is the system that modern sanitary science elsewhere has pronounced best; and Paris has at last decided to adopt it. The change has been a gradual one. It was ushered in by a system of filtration apparatus which drains all liquids into the sewer, leaving only solid matter in the fosse, and reducing the bulk of the material for the vidangeur to a small fraction. From five thousand in 1871 these filters had increased to thirty-five thousand in 1891. In 1886 it was provided that houses connecting with certain sewers which were suitably constructed might avail themselves of the tout à l'égout system; and in 1891 about five thousand connections of this kind had

Old methods abandoned.

actually been made. In 1892 it was determined to make the modern system obligatory wherever the sewers could be adapted to it; and since that year the transformation has been proceeding rapidly. In 1871 there were in Paris more than eighty thousand cesspools, and in 1896 this number will perhaps have been reduced to fifty thousand.

Disappearance of cesspools.

The flushing of the sewers, in which the ordinary flow is too sluggish for the proper scouring away of sludgy sediment, is accomplished by the establishment in connection with them of a system of small *réservoirs de chasse*, so called, which are filled and discharged automatically at regular intervals, and which emit enough expulsive force to drive everything in the sewer to a point beyond the next reservoir. Soon after the beginning of this system of expulsive reservoirs, as many as fourteen hundred of them had been placed in the sewers. Several thousand will ultimately be needed, and they will draw heavily upon the public water-supply. Nothing in the recent sanitary administration of Paris is more significant than the abandonment of the ancient cesspool system in favor of the best new methods, together with the relief of the river Seine through the adoption of comprehensive plans of sewage disposal by means of irrigation.

Reservoirs for flushing sewers.

As I have already remarked, the Paris sewers were designed with reference to their use as general subways. Supported along the walls near the top of the gallery one finds not only the water-pipes of the double supply system, but also the telegraph and telephone wires; the pneumatic tubes which facilitate the collection and distribution of letters; the pipes of the compressed-air service that furnishes motive power for small users, and that maintains a system of

The sewers as subways.

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pneumatic clocks; and perhaps one or two other kinds of pipes or wires. The gas and electric light companies are otherwise accommodated under the sidewalks, but they are the only exceptions to the rule of the use of the sewers as conduits for all the services that require pipes or wires. The telephone system of Paris is operated by the national government in connection with its department of *postes et télégraphes;* and while it pays nothing for its placing of telegraph wires and pneumatic tubes in the sewers, it pays liberally for its telephone accommodations. Numerous private telegraph and telephone wires also pay at the same rates (from fifty to thirty francs a year per kilometer of line), and the municipal treasury from these sources, together with the payments from the compressed air company, is in receipt of a revenue approaching a million francs. I have already mentioned the payments exacted from the gas and electric light companies for their privileges under the streets.

Revenue from wires and pipes in sewers.

In nothing is the municipal thrift and close attention to financial details better illustrated than in the exploitation of small privileges and concessions in the streets and in the public parks. One of the distinct sources of Parisian revenue — aggregating a yearly income of 3,500,000 francs — is summed up in the official budgets under the chapter heading, "*Locations sur la voie publique et dans les promenades publiques.*" In this category are included hundreds of newspaper kiosks, refreshment stands, luminous advertising pillars for theatrical notices, *chalets de nécessité* (public lavatories), and urinals to the number of perhaps two thousand, the walls of which are used for advertising purposes. In the Champs-Élysées, the Bois de Boulogne, the Bois de Vincennes, and various other parks, squares, and gardens, there are almost innumerable privileges and concessions leased to individuals for

Privileges and concessions in streets and parks.

sums which help to make up the grand total of 3,500,000 francs. Nor can it be considered that any of this money comes by way of indulgence for the permission of nuisances. The newspaper kiosks, advertising pillars, refreshment stands, and other *locations concessionées*, all contribute towards the convenience of the people, and they are not permitted to be unsightly. The revenue from these sources is almost entirely a net income, and it aids materially in the cost of maintaining streets and open spaces.

An instance of municipal thrift.

The parks of Paris are entitled to some special mention, although for the purposes of the people the broad and well-cleaned avenues with their rows of shade-trees are to be deemed the most important provision for out-of-door life and recreation. On all the streets having a width of twenty meters or more there are rows of shade-trees, and most of the broad thoroughfares have also a middle strip, planted with trees, grass, and flowers. Benches are everywhere provided under the trees, and thus in some sense the whole city may be considered a park. The river and the quays form the most valuable of the breathing spaces of Paris. There are nearly a hundred thousand trees along the chief streets; and this is a great number when account is made of the compactness of the city.

The streets as parkways.

Shade trees on the avenues.

The avenues and boulevards are, indeed, considered as a part of the park system, in so far as they are planted with trees and provided with gardened strips; and the whole service of "*promenades et plantations*" falls under the supervision of the same engineer-in-chief who, as head of a branch of the public works department, is also in control of street illumination and of concessions on the *voie publique* and in the parks. The grouping of these tasks is a felicitous one. The same oversight thus controls (1) the public parks and gardens (2) the streets in their aspect as parkways,

The park administration.

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both streets and parks in (3) all matters of illumination, and again in (4) everything that concerns the erection of booths or kiosks, or the granting of other privileges on the sidewalks or in public squares and gardens. Esthetic harmony is thus assured, and much economy of administration results.

The Bois de Boulogne.

Naturally enough, when the transformation of Paris was determined upon in 1852, the question of parks was not omitted. It was determined to make the Bois de Boulogne, lying immediately west of Paris, the great pleasure-ground of the new dispensation, and to provide grand approaches to it in connection with the new boulevard system. The Bois had survived as part of an ancient forest owned by the state. But it was not improved, nor was it easy of access. In 1852 the state granted it to the municipality of Paris on condition that it should be developed as a modern park without delay. Fourteen millions of francs were soon expended upon it, the larger part of which was recovered by advantageous sales of adjacent building sites. As finally adjusted this noble pleasure-ground contains 873 hectares (about 2250 acres), and as the city's suburbs expand it becomes constantly more accessible to a large population.

Advantageous financiering.

The Bois de Vincennes.

The opposite end of Paris was similarly recognized by the acquisition from the state in 1860 of the Vincennes forest, upon which even greater sums were expended. The Bois de Vincennes now contains 943 hectares (about 2,400 acres), and its conversion to its present attractive character involved an outlay in the years 1860–66 of nearly 24,000,000 francs. The original grant was larger, but by permission of the state the municipality sold 125 hectares to private builders for about 13,000,000 francs, and thus materially reduced the cost to the Parisian taxpayers of a park that is now worth many scores of millions.

Within the city limits the parks were few in earlier times, although the people had some access to several old royal pleasure-grounds, chiefly the gardens of the Luxemburg, the Tuileries and the Champs Élysées. There are now nearly a hundred squares, parks and gardens open to the people, most of which are municipal property, though a few belong to the state. The largest and most picturesque of these is the Parc des Buttes-Chaumont in the northeast of Paris, with an extent of 62 acres, which was completed among the last great works of the Haussmann period and opened in 1869. The Parc de Montsouris in the south of Paris, which contains perhaps 45 acres, was opened somewhat earlier. The later endeavors of the administration have been directed toward the multiplication of small parks and playgrounds in the poorest and densest quarters of the city; and since the beginning of the third republic there has been no endeavor to add to the number of large parks. The operations of the municipality as florist and gardener are necessarily on a vast scale; and one is tempted to dwell upon the great establishments in the Bois de Boulogne, where the nurseries and green houses are concentrated, and where youths from all lands are sent to learn floriculture from the accomplished gardeners and botanical experts in the service of the Parisian "promenades et plantations."

Other Parisian parks.

Small parks and playgrounds.

Municipality as botanical gardener.

The use of the voie publique of Paris for purposes of transit by means of street railways and otherwise is a topic of increasing interest, and one that is so closely related to that of the housing system and of the territorial distribution of the inhabitants that both may well be considered together. Paris in the past centuries has grown by concentric accretions, military defenses having determined from time to

Transit and housing.

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time the municipal metes and bounds. As in many another European city, the encircling boulevards reveal historic lines of bastioned wall and moat, abandoned in favor of a new, outer cincture. Any boldly outlined street map of Paris shows readily, by the division lines of the arrondissements, the more important successive perimeters. Originally beginning with the "Ile de la Cité" in the Seine, which still lies at the heart of the metropolis, Paris became in 1180, under Philip II. Augustus, a round, walled city on both banks of the river, with an area of 252 hectares (a hectare is 2.4711 acres). In 1370 Charles V. built a new wall on the north side, and this was further extended on the west, some three hundred years later, so that the city then included 567 hectares. Louis XIV. and Louis XV. made considerable annexations, but it remained for the government of Louis XVI. in the years 1784–91 to fix a new line enclosing the more generous space of 3370 hectares; and this remained the limit of the Paris municipality until 1860.

Concentric accretions.

Historical development of area.

The Paris of the Bourbons was nearly round, and was almost equally divided by the river one way and by the Boulevards St. Michel and de Sebastopol at right angles with the river, being encircled by what is now known as the inner line of Boulevards, with the Bastile at the extreme east, the Madeleine, Place de la Concorde, and Hôtel des Invalides at the extreme west, and the Mont Parnasse and Port-Royal Boulevards marking the southern curve. Louis XVI.'s great annexation included chiefly the districts lying on the north side of the river between the inner and outer lines of boulevards, an accretion very distinctly indicated on the map. This area remained without change until January 1, 1860. The government had constructed after 1841 the present girdle of fortifications, and it was inevitable that this should sooner or

Paris under the Bourbons.

The fortifications, and the extension of 1860.

later become the boundary line of the city. The new limits were established by the law of 1859. At that time the existing limits of the arrondissements were fixed, the old area being divided into what are known as the ten inner arrondissements, and the annexed districts, or "faubourgs," with adjacent parts of the inner city, into the ten outer arrondissements, each one being given a name and a number. At the same time each arrondissement was divided into four quarters, each of which was named.

The Paris of 1790 contained a population of 600,000, the area now comprised in the outer ten arrondissements being rural, with only ten or fifteen thousand people. At the time of the annexation in 1860, as shown by the census of 1861, the inner ten divisions had more than 900,000 people, and the outer ten more than 700,000, a total exceeding 1,600,000. It is extremely interesting to follow the subsequent development of population. The inner ten divisions actually lost more than 30,000 people in the decade from 1861 to 1871, a period in which great demolitions and street improvements were made; and in the same decade the outer ten divisions gained more than 200,000 people. From 1871 to 1881 the inner ten gained 116,000, while the outer ten gained 300,000. From 1881 to 1886 the inner ten lost 18,000 and the outer ten gained 94,000. The net result of the twenty-five years from 1861 to 1886 was a gain of 64,845 for the inner ten arrondissements and of 611,850 for the outer ten, the one half having 1,010,970 people, and the other 1,330,580, a grand total of 2,344,550. By the census of 1891, the total population was 2,447,957 — a gain in five years of 103,407, practically all of which must be credited to the outer ten.

Growth of population in the old limits.

Rise of the outer zone.

Obviously the inner divisions have reached their maximum inhabitancy. What we may call the old

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Paris has for fifty years had a population averaging about 1,000,000; and there have been added 1,500,000 more people, occupying the belt of arrondissements inside the fortifications, the Paris of to-day having more than 2,500,000 inhabitants.

Progress of the new suburbs.

Meanwhile the suburban population outside the fortifications has been growing rapidly. The little communes of the department of the Seine, outside of Paris, are grouped in the two arrondissements of Saint Denis and Sceaux. Altogether this exterior belt had a population of about 255,000 in 1861, which had grown to more than 600,000 in 1886, was nearly 700,000 in 1891, and will within a few years have reached a full million.

The actual defenses of Paris.

It only remains to tear away the line of fortifications, and to fill up the great ditch, in order to permit the city to expand freely under the impetus of the modern suburban tendency. The real military defenses of Paris now take the form of two lines of entrenched camps and forts, one of which is at an average distance of three or four miles outside the wall of cincture that forms the city limits, while the other and more formidable one is yet several miles further distant. The existing Paris covers 19,275 acres, orab out thirty square miles, within which are housed more than 2,500,000 people. The average distance from center to circumference is only three miles.

Area of the department of the Seine.

The department of the Seine, at the center of which Paris lies, contains nearly 184 square miles, including Paris, and its outer edges lie at an average distance of only seven or eight miles from the center of the metropolis, or from four to five miles beyond the existing city limits. Inasmuch as the whole department is already under the administrative direction of the two prefects who administer Paris, while the council-general of the department consists of the Paris

municipal council with the addition of a handful of men from the two extra-mural arrondissements, nothing would seem easier than a complete assimilation of the government system. And since the cincture defenses are obsolete for military purposes, every sound argument demands their removal, to be followed by annexation of the whole suburban belt to the municipality. Such a project is under consideration, and its accomplishment is only a question of time. The line of fortifications will afford a magnificent opportunity for effective boulevards and public gardens, while also permitting the sale of several hundred million francs' worth of building sites. This improvement, accompanied as it would inevitably be by a development of improved transit systems and the rapid up-building of the suburbs, will quite probably be decided upon by the state and the municipality as the closing and crowning event of the century in the history of the *grands travaux de Paris.*

Reasons for amalgamation of department and city.

An opportunity for additional "grands travaux."

The metropolitan London houses a population of 4,230,000 (census of 1891) within an area of 123 square miles — an average of 34,400 to the square mile, while within the 30 square miles of Paris there are 2,500,000 people, or 83,300 to the square mile. This is a high degree of density, although it does not follow that the people of London, living in houses of two or three stories, with an average of eight persons per house, are better housed or less crowded than the Parisians who occupy large tenement houses of four or five stories, with an average of 30 persons to the house. In Manhattan Island (New York City), according to the census of 1890, the density per square mile was 73,300. But for several of the most crowded wards of New York the density averaged more than 300,000 per square mile, which is far in excess of anything to be found in corresponding areas of Paris or

Parisian density compared with London's.

Compared with that of New York.

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With Brooklyn's.

With Chicago's.

Density in the heart of Philadelphia and Boston.

Relation of density to transit.

New importance of transit in Paris.

London, where there is a comparatively even distribution throughout the municipal area. Brooklyn in 1890, in a municipal territory of 26½ square miles, (somewhat less than that of Paris) accommodated 806,000 people, or about 30,500 to the square mile. Chicago, with 160 square miles and a population in 1890 of 1,100,000, could boast an average of only 6850 to the square mile. But Chicago's central wards have nearly ten times that density, and may be regarded as accommodating from 60,000 to 75,000 people per square mile, while Philadelphia and Boston, as well as Brooklyn, are housing in their densest districts a population that averages 100,000 to the square mile. The remarkable fact about the Parisian density is its high average for the entire city, in which regard it has no equal. It is a marvelously compact system of housing that provides for 2,500,000 people within a circle whose radius is only three miles.

All these considerations bear vitally upon the question of transit. The people of inner Paris have not, as a rule, far to be transported from their work. Very many of them live on the *étages* above their shops and business places. Instead of taking street cars or omnibuses to go home, they simply walk up-stairs; and similar statements might be made for the major part of the population of the outer arrondissements. Every quarter of the city is at once a business quarter and a residence quarter. Nevertheless, as the city grows in its outer districts, and as population rapidly increases in the suburbs beyond the gates, there is an enhanced regular daily movement to and from the central arrondissements where the principal business operations are massed. Thus the transit question assumes constantly increasing importance in Paris, as in the other large cities of the world.

There are two kinds of municipal transit that must

be recognized, just as there are two kinds of streets in the great European cities. These cities have (1) their network of minor streets, and (2) their system of great thoroughfares and boulevards pertaining to the metropolis as a whole. Analogously, they have their systems of strictly local street transit, by cabs, street railways, and omnibuses, and their more rapid system of what may be called metropolitan transit. It is this latter system that great cities are most earnestly discussing in the closing years of the century. In London it takes the form of the underground railways and of innumerable suburban trains on all the great railway lines. In New York and Brooklyn it has its beginning in the elevated railway system, and is to have great extensions in the early future, in part by means of underground electric roads. In several American cities the surface lines of cable and electric street railways are made to answer temporarily the double purpose of local and metropolitan lines. But Paris, thus far, has developed no metropolitan system at all except the belt line, the *Chemin de Fer de Ceinture*. The density of its population and the prevalence of high houses, as I have shown, sufficiently explain the tardiness of this great capital in such matters. The local systems of transit, by cabs, omnibuses, and tram-cars, have had a steady development in Paris, however, and for a number of years the public authorities and skilled engineers have been anticipating the necessity of a metropolitan rapid transit system and have given the subject a vast amount of study and discussion. The consequence is that important beginnings seem about to be made, and after an account of the existing transit arrangements I shall refer to these new proposals.

Metropolitan systems of passenger transit.

Yet to be developed for the Parisians.

All kinds of passenger transportation in Paris have always been strictly supervised by the authorities.

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History of omnibus system.

The omnibus system of the metropolis became important early in the century. In 1854, by arrangement with the administration, fifteen existing omnibus lines became absorbed in the *Compagnie Générale des Omnibus*, to which an exclusive franchise was given for thirty years upon condition of large annual payments to the city — a franchise that was renewed after the eulargement of the city in 1860, and was then extended to the year 1910. Under the plan of 1854 the company was required to pay the city 640,000 francs a year, with additional sums for each vehicle exceeding 350. By the arrangement of 1860, which is still in force, the company agreed to pay 1,000,000

Terms of franchise.

francs a year (which was at the rate of 2000 francs apiece for 500 vehicles), and to pay in addition, for every omnibus used beyond the number of 500, an annual fee of 1000 francs until 1871, to be increased to 1500 francs from 1871 to 1886, and thereafter to be fixed at 2000 francs. Thus the present payment is 2000 francs each for every omnibus in use, and the number actually in use for a number of years has

Introduction of street railways.

somewhat exceeded 600. After 1873, street railways were introduced, and those of inner Paris were constructed and operated by the Compagnie Générale des Omnibus as an added part of its business, its street-railway franchises also extending to the year 1910. The company pays into the city treasury 1500 francs per year for each tram-car on its lines, and it has

Payments to municipal treasury.

about 300 in operation. There are also two other street-railway companies operating in the newer and suburban parts of Paris, one system on the north side and the other on the south; the southern system paying the city 1500 francs a year for each car, and the northern system paying 750 francs per car.

The omnibuses and street cars of Paris are absurdly large, ponderous, and slow, but they are operated

upon the most methodical system in the world. The routes and halting-places are precisely defined, and along each route is a series of neat stations built upon the sidewalk. Everything pertaining to the size and construction of the vehicles and the station-houses; to the style of rails and placing of tracks; to the arrangement, change, and addition of routes; to the prices charged and the transfers given; and to almost every other imaginable detail affecting the business, is prescribed by the public authorities. Upon the principle employed in dealing with the gas company as a chartered monopoly, the city has a right, after prescribed dividends and all public charges and private expenses are paid, to one half of the surplus profits of the *Compagnie des Omnibus et des Tramways;* but thus far little has been realized from contingent profits. The Compagnie Générale transported in its omnibuses in 1893 more than 126,000,000 passengers, and in its tram-cars more than 86,000,000. Its business had grown from 108,750,000 passengers in 1872 to 215,000,000 in 1889. The other two tramway companies transported some 27,000,000 passengers each in 1893, making a grand total for Paris of 126,000,000 passengers carried by omnibus and 140,000,000 carried by street railway. These are not large figures when compared with corresponding ones for American cities; but it is worth while to remind American readers that the Parisian transit companies pay more than 2,000,000 francs a year to the city treasury as a rental for the privileges they enjoy on the streets.

Details strictly regulated.

Half the surplus profits go to the city.

Volume of business.

Nearly all the cabs and public carriages of Paris belong to one great company,— the *Compagnie Générale des Voitures de Paris,* — which has about 8000 vehicles in use. For the use of the public cab-stands, and their license to do business, each carriage must pay an annual license fee of 365 francs — a franc

Control of cab system.

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per diem. In 1855, following the example of the Compagnie Générale des Omnibus and the fusion of the gas companies, monopolies being the fashion, special privileges were accorded to a great cab company that was formed to absorb numerous small proprietorships; and in 1862 this company obtained an exclusive franchise for the use of cabs and public carriages throughout the enlarged municipality, upon the basis of a payment to the city of one franc per day for each vehicle, and of a division with the city of the surplus profits, as provided in the contracts with the gas and omnibus companies,—the patrons being protected by a fixed scale of charges and a minute code of regulations. But this monopoly was not deemed advantageous, and the exclusive privilege was revoked in 1866. To the surprise and indignation of the city government, the cab company obtained a judicial award of damages to the amount of 300,000 francs per year for each of the remaining forty-seven years of the original fifty-year grant. That excessive award has of course given the company an advantage over all competitors, and it has steadily grown. Since 1866 the cab business has been free to all applicants, subject to the laws regulating the details of the service, and the fee has remained at 365 francs a year. There are about 10,000 public carriages in Paris, of which four fifths belong to the Compagnie Générale des Voitures. The annual receipts of the city from cab licenses reach 3,700,000 francs; and the total receipts under the head of *voitures publiques* (the street-railway and omnibus payments being included) amount to about 6,000,000 francs. In the past ten years, therefore, Paris has received nearly 60,000,000 francs as rentals and license fees from companies and individuals using the streets for passenger transportation. Undoubtedly for a number of years past the city council has

A monopoly cab franchise.

A costly withdrawal.

Total receipts from public vehicles.

not been especially friendly to the great monopoly companies of Paris, and it would be more than willing to have some of them superseded by a system of direct municipal operation. But conservative public opinion prefers the existing arrangements, and assuredly they are not disadvantageous. What is especially needed in transportation facilities is a very great extension of the street railways and omnibus lines, with the introduction of small vehicles and a far more frequent and rapid service. The existing system of licenses, that puts a penalty upon an increase in the number of tram-cars and omnibuses, is clearly a wrong one.

The Paris system of monopoly companies.

But in addition to these facilities for local transit, Paris needs a metropolitan system. I have referred to the belt railway. It follows the perimeter of the city just inside the fortifications. It is primarily a line for the connection of the great railways entering Paris. Only one of these roads has its passenger station conveniently near the center of the city, and the transfer of goods and passengers has been extremely inconvenient. The girdle line also serves, however, for a considerable amount of ordinary local transportation of passengers, and may be deemed part of a system of metropolitan rapid transit. For the completion of such a system several elaborate plans have at different times been worked out under the auspices of government and municipal engineers. Some have been plans for underground and others for elevated lines. But all have involved great expenditures, and called for heavy subsidies or guaranties. It is probable that the final judgment will be given in favor of an electric underground system connecting the chief railway-stations and combining an inner circuitous line, following the boulevards, with lines across the city from east to west and from north to

The girdle railway.

A probable electric underground system.

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south. The abolition of the present municipal limits will be the signal for a new transit system, for a reduction of the density of the existing city, and for a rapid overflow of population into the broad outer zone to be annexed.

The building regulations.

Allusions have already been made to those laws governing construction which have secured for Parisian street architecture its air of regularity. The height of buildings had always been a matter of public regulation, but it became necessary in the Haussmann period very greatly to revise the entire code of building rules. Many buildings were destroyed in the terrible weeks of the siege and commune (1871), and the building laws were again revised and improved in 1872 to meet the exigencies of a period of unusual activity in construction. Buildings of great height have never been tolerated in Paris. The avenues, boulevards, and principal streets have been lined with houses under rules which fixed the maximum height of façades at 20 meters (65½ feet), which have prescribed the number of stories, and which, above all things, have compelled private builders to observe for any given street, in the language of the law, the "raccordement et l'harmonie des lignes de construction." The laws also require the periodical repair or repainting of all façades, to assure the neat and fresh appearance of every street.

Height strictly limited.

Harmony required.

Houses and health.

If in the earlier part of the Napoleon-Haussmann era it was the outward aspect of the city's houses that was chiefly regarded by the administration, there came a gradual recognition of the necessity for careful regulation of interior construction, particularly from the point of view of the public health. For, to speak sweepingly, all houses are tenement-houses in Paris, and unquestionably it belongs to the genius of Parisian administration to regulate minutely the

arrangement and the occupancy of such structures. The remaking of Paris streets, and the acquisition of the Île de la Cité and other central areas for public buildings, resulted in the clearing away of many ancient and unwholesome slum houses; and the whole spirit of these modern reforms has been favorable to an improvement of the housing conditions of the masses. Nevertheless, there have survived in Paris great numbers of objectionable houses, against which the health authorities have had to make unceasing war.

Clearance of slums.

The methods pursued in this administrative crusade against unsanitary conditions of every character in the homes of the people have been too little known in the English-speaking countries. They have been remarkably efficient. For several decades there has existed a permanent special body of experts charged with the constant supervision of this one subject. It is entitled the *Commission des Logements Insalubres.* It is composed of thirty members, ten of whom are appointed every two years by the municipal council, the term being six years, and reappointments naturally being the rule. The members of this commission, apart from the prefect of the Seine, who is ex-officio president, are not public functionaries, but are as a rule well-known citizens — physicians, architects, engineers, and men who, for one reason or another, are especially qualified to pass upon questions relating to the hygiene and construction of houses. The commission usually meets weekly. Its members live in various parts of the city, and look promptly into all complaints. They do not make investigations except upon receipt of complaints, because there exist various and ample agencies of official inspection in all the arrondissements, and because all tenants are instructed that they may at any time send by

The "commission des logements insalubres."

Expert membership.

CHAP. I.

Methods of the board.

mail an unsigned complaint calling attention to the condition of the building in which they live. The commission acts upon all complaints, decides the nature and extent of repairs that should be made, or designates as uninhabitable the houses that are beyond reclamation. Its reports go to the municipal council, which as a rule confirms all its recommendations. The owner has a right to be heard, but the judgments of the commission carry prestige, and are seldom reversed.

Operations in twenty years.

In the twenty years from 1872 to 1892 the commission had secured sanitary improvements in the case of about fifteen thousand houses, and it must be remembered that most of these were buildings lodging a number of families, so that nearly half a million people were more or less immediately affected. The members of the commission are not paid salaries, but receive an attendance fee of ten francs for each meeting, and a further fee for each written report that they make upon houses in their respective districts. The salutary results of such an organization, always ready to act, can hardly be overestimated.

The sanitary council.

But this commission on unhealthful houses is an executive body devoted to a single feature of sanitary administration. The great central source of scientific authority upon all the questions that relate to the public health is the *Conseil d'Hygiène et de Salubrité*. It is a board of health of the highest possible prestige, which dates from the year 1802. The prefect of police presides over it, and besides some twenty-four life members who are specially appointed for their high attainments, and who must be confirmed by the general government, there are ex-officio seats in the council for such men as the dean of the faculty of

High official membership.

medicine in the University of Paris, the professors of

hygiene and legal medicine in the same faculty, the director of the college of pharmacy, the president of the army sanitary board, the director of Parisian public works, two chief engineers holding high official posts at Paris, two members of the municipal council, the head of the veterinary health service of the department, a chief architect, and several high police officials. The ex-officio membership gives assurance of much special and expert talent, while in point of fact the life appointments are also made as marks of high honor for eminence in the world of professional and scientific knowledge. This magnificent Council of Public Health is an advisory rather than an administrative body. It sets the standards, and affords the actual administrative authorities the best attainable enlightenment upon methods and principles. It is consulted upon the treatment of epidemics; upon the organization of medical relief; upon questions of health relating to workshops, schools, and various institutions; upon the best ways to prevent adulteration of food supplies; upon the sanitation of new public buildings, and the principles of sanitary construction to be observed in private buildings; upon the scientific aspects of water-supply, drainage, and cemetery management; and, in short, upon every question as it arises that pertains in any general sense to the health of the community. The body assembles twice a month, and the life members receive an attendance fee of fifty francs, only ten francs being paid as a *jeton de présence* to the ex-officio members.

The twenty-four life members.

An advisory body.

Wide range of its topics.

This central health council has the important advantage of the coöperation of twenty local boards of health (*commissions d'hygiène*) established in the arrondissements. Here, again, one finds that recognition of neighborhood life which I have already dwelt upon as so characteristic a part of the administration

The twenty "commissions d'hygiène."

CHAP. I.

of Paris. The maire in each arrondissement presides over the local health board, which must meet at least once every month to consider the sanitary condition of the district. Nine members, appointed for six years (three retiring every two years), constitute the board, with the maire as tenth member and president. The board itself proposes three names for each vacancy, and the prefect of police selects a man from the list thus offered. Each of these arrondissement health boards must contain at least two physicians, one pharmacist, one veterinary surgeon, one architect, and one engineer or technical head of a manufacturing establishment. The boards are in position to know familiarly the general state of health in their own divisions of Paris, and are of immense service in all times of emergency,—their most important work having to do with measures against the spread of epidemic diseases. They are also active in the work of reporting unsanitary houses to the central commission on *logements insalubres*. They have assigned to them important duties of statistical inquiry and collation, and they make frequent reports to the prefect of police, who in turn refers everything to the central health board, under the auspices of which the health statistics of the city as a whole are compiled.

Qualifications for membership.

There is a central sanitary bureau in the prefecture of police, which supervises the active administration of all the health laws, by means of numerous active agents belonging to the special service of sanitary police. Since 1884 there has been a rapid development of the municipal disinfection service, which is organized for the prompt cleansing of domiciles in which there have been cases of infectious disease, and which also maintains a series of disinfecting stations provided with modern ovens and other appliances for the thorough treatment of articles brought in sealed

Sanitary police.

Disinfection service.

vans from infected homes. The removal of cases of infectious disease to special hospitals is not so general in Paris as in some other cities, although it is becoming more frequent. The epidemic hospitals of Paris are not managed separately as a part of the sanitary administration, but belong to the general system of hospitals controlled by that distinct branch of administration known as assistance publique, that is to say, poor relief, or public charity. There are historic reasons for the existing arrangement, but plain logic and the highest efficiency would seem to require that hospitals for the isolation of epidemic maladies should be wholly removed, in management as well as in location, from the ordinary hospitals of public charity and private beneficence.

Epidemic hospitals.

Few problems closely related to the health and welfare of the community have been more difficult for Parisians to solve conclusively than that of the cemeteries. Habitude and prejudice increase tenfold the perplexities which would in any case be formidable enough. Paris is a very ancient city, and many millions of people have died within its narrow limits. Custom of the most obstinate sort, about which many institutions and observances have grown up, has required the interment of the dead within easy walking distance. A long time ago it was ordained that cemeteries must be closed within the city limits, excepting as Père Lachaise and several other well-known burying-grounds continue to be used by families who hold perpetual concessions in them. But all attempts to solve the problem by the acquisition of a very large new cemetery at some distance from the city, to be reached by a special railway, were futile because the people would not change their customs. The cemeteries in the immediate vicinity of the municipal limits have been somewhat extended, and the same plots of

The problem of cemeteries.

Persistence of custom.

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ground are used over and over again every five years, in a manner not pleasant to contemplate.

The municipal crematory.

A few years ago, after many previous refusals, the French chambers enacted a law permitting cremation in Paris, and the municipal council at once established a crematory in the Père Lachaise cemetery. An elaborate system of regulations has been devised, and cremation is constantly growing in favor. Perhaps three thousand cremations a year would be as high an average as could be claimed for the years from 1890 to 1895. The municipality is disposed to encourage this modern innovation so far as possible; and when the popular prejudice against it has yielded somewhat there can be little doubt of its rapid gain.

A report on relation of cemeteries to public health.

Meanwhile the health board had begun exhaustive scientific inquiries into the effect of the existing cemeteries upon sanitary conditions; and it has made a report that is unexpectedly lenient and optimistic. The cemeteries are wholly municipal, and the service is a thoroughly organized one, with a central business bureau in the prefecture of the Seine, and a chief *contrôleur* of the service. It is well managed from the financial point of view, and productive of net revenue.

Funerals an ecclesiastical monopoly.

The whole conduct of funerals in Paris has been assigned to the churches as a monopoly under the control of a central board known as the *Conseil d'Administration du Service des Pompes Funèbres*. The vestries of the Catholic churches elect ten members of this board, the two leading Protestant communions have each a representative, and the Jewish synod has one. The Archbishop of Paris appoints a vicar-general as a member, and the chief municipal inspector of funerals has a seat. This ecclesiastical monopoly deals in all the paraphernalia of funerals, from the simplest to the most elaborate; maintains, for instance,

a vast stock of coffins, and collects its bills in accordance with a minute scale of charges that has the sanction of law. A large amount of money is invested in a wholesale stock of funeral goods by the syndicate of the vestries. This monopoly arrangement was established in 1878, and it has a collective income of perhaps three million francs a year, a small part of which is paid to the municipality to meet the expenses of the official service of funeral inspection, while the rest is divided *pro rata* among the constituent churches and parishes. Whatever criticisms may be brought against the system, there may be said in its favor that it has the merit of regularity and uniformity in method and in charges; that it helps to protect the poor against extortion; and that for the community as a whole it probably insures a more dignified and appropriate conduct of obsequies at a smaller average expense than could be expected from private entrepreneurs if the monopoly were abolished. But with or without this ecclesiastical management, there would continue to exist the strictest municipal oversight and control, because for centuries it has in France been deemed a public duty to regulate everything having to do with the disposition of the dead.

Its business methods.

Merits of the system.

Strict municipal control.

Under the old régime at Paris the interference of state and of municipality in the business of food-supply went much further than an ordinary control of markets, with an inspection of meat and drink, of bread, fruit, and all sorts of alimentary substances and products, in behalf of the public health. It completely denied every principle of commercial liberty, proceeding upon the doctrine that the *approvisionnement* of a great capital required governmental initiative or interposition at every point. The regulations

Government and food-supply.

CHAP. I.

Public regulation of trades.

that governed the exercise of trades connected with the food-supply, and that prescribed prices, were so enforced as to bring butchering, baking, wine-selling, and other trades into the position of semi-public monopolies. The spirit of all this regulative system has gradually changed. The administration continues to exercise large supervision, but commerce has been unshackled, and the natural laws of trade are relied upon to secure for the Parisians a constant supply of food and drink at normal prices. The existing municipal agencies seem to me to be highly commendable. Taken together, they comprise a large property investment, and a series of elaborate and skilled administrative services; and they form a considerable source of municipal revenue.

Existing agencies of supervision.

The public-health motive.

Whereas the ancient motive that governed public policy was to make sure of a sufficient and cheap food-supply, the present motive is to exercise an oversight for the public health and welfare. This *surveillance de l'alimentation* is made comparatively easy by the municipal ownership of all markets, cattle-yards, and slaughter-houses, together with great entrepôts, or storage-houses, chiefly used for wines and other drinks, and by the further fact of the octroi system, which makes possible a preliminary inspection of food-supplies from the health standpoint when at the city limits or in the railway stations they are examined by the revenue officers of the municipal customs service.

The central market.

The market system of Paris is undergoing almost constant extensions, to the great benefit of the people. The Halles Centrales, a huge covered market of about twenty-two acres in the heart of the city, is the nucleus for the wholesale distribution every morning of the food-supplies that arrive in the night from all parts of France and from neighboring countries. In

due time this market will be served by an underground railway connecting with the belt lines. It has retail as well as wholesale pavilions, and is probably the greatest market in the world. It stands where public markets have for centuries been concentrated; but the present buildings belong to the era of the Haussmann aggrandizements. The plans were adopted in 1854, and 50,000,000 francs were spent in carrying them out. The basements are great storage warehouses. But the municipality also maintains covered retail markets in all parts of the city, which are in daily operation, besides a number of open-air markets, with two or three market-days every week. The existence of nearly a hundred public markets, great and small, does not prevent a large number of *magasins*, or private shops and stores, from dealing extensively, at wholesale and retail, in all kinds of alimentary supplies; but it is readily seen that the market system is a most wholesome regulator of prices, and that it benefits at the same time the working-people of the metropolis and the gardeners and farmers of the vicinity. From concessions in the market places the city has an annual income of more than 8,000,000 francs.

The present buildings.

A hundred other markets.

Municipal income from markets.

The concentration of the slaughtering business in a series of municipal abattoirs was a policy adopted early in the century, five such establishments superseding the hundreds of private slaughtering-sheds in which each butcher prepared his own beeves, sheep, and swine for the shambles. In this enlightened policy, as in so many others, Paris led where Europe and the civilized world have followed. The annexation of the suburbs in 1860 necessitated the suppression of private slaughter-houses in the new arrondissements; and accordingly there was built in the Villette quarter, at the north of Paris, the immense *abattoir général*, in

Public abattoirs.

CHAP. I.

which since 1870 almost the entire business of slaughtering the metropolitan meat-supply has been concentrated. Two of the five earlier abattoirs have a limited patronage, but La Villette holds the almost exclusive monopoly. Adjoining the huge abattoir are the municipal cattle-yards and markets, with accommodations for scores of thousands of animals. Lately there has been added a large establishment called the Sanatorium, in which animals subject for any reason to suspicion of infectious disease (particularly sheep from eastern Europe) are held in quarantine pending examination. The cattle trade is admitted to the use of the stock-yards on payment of moderate fees, while all butchers in like manner have access to the abattoirs, subject to the proper regulations. This concentration of the meat-supply, it need not be said, facilitates prompt and complete scientific inspection by the municipal health officers who are detailed to that particular task. It would not, of course, be politic to exploit an abattoir monopoly for large public revenues. The average income from this source has for some years been about 3,000,000 francs, which is amply remunerative.

Municipal cattle-yards.

Inspection facilitated.

The service of food inspection, which has its out-of-door staff stationed in the Halles, markets, and abattoirs, or detailed to visit the bakeries, milk-shops, and various places where supplies are sold, is directed and supported in its work by a great chemical and bacteriological laboratory, which within a few years has grown into a position of prime importance in the administrative work of Paris. The city had been early to employ the best available engineering, architectural, and other technical talent, and its discovery of the many valuable uses to which a modern scientific laboratory may be put was sure to come in due time. Until nearly 1880 the prefecture of police had

The municipal laboratory.

maintained a force of so-called *dégustateurs*,— tasters, as we should say,— whose duty it was to go from *boutique* to *boutique*, from milk-shop to bake-shop, and from butcher to green-grocer, tasting and smelling and prying in order to find adulterations or unwholesome conditions. These tasters were the subjects of derision, violent abuse, petty bribery, numberless complaints. The laboratory has substituted exact science for unreliable guessing. Thousands of specimens every year are taken by the department or submitted by individuals for analysis. When the milk examinations began in earnest in 1881, it was found that more than fifty per cent. of the specimens analyzed showed adulteration — a most appalling circumstance in view of the relation that pure milk bears to child-life in a great city. In 1891 the milk adulterations had fallen to less than ten per cent. The value of this improvement in the milk-supply is almost beyond computation. If the laboratory had done nothing else, this would have justified its creation and cost a hundred times over. But the bread-supply, so essential to the Parisian poor, who almost live upon the long loaves of the bake-shops, has also been rendered very much more wholesome by the discovery, thanks to the municipal chemists, of various deleterious substances and processes. As for the wine of common consumption, its adulteration was found to be almost universal before 1880; but thousands of analyses, followed by swift apprehension of offenders, have quite transformed the character of the supply. In a hundred ways not at first anticipated, the municipal laboratory has come to the service of honest trade and to the protection of the consuming public. At a moderate price it is ready to make a prompt and authoritative analysis for any private applicant. As a rule, the imperfec-

The old-fashioned "tasters."

Replaced by chemists.

Improvement in milk supply.

Reform in the bake-shops.

Adulteration of wines.

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tions in food articles discovered since 1890 are of a far less serious nature than those found ten years earlier. Harmful substances are not often found to-day in the Parisian confections, whereas in 1880 such adulterations were usual. The laboratory makes hundreds of water analyses yearly, gives scientific aid to the practical service of disinfection, in several ways contributes to the work of improving the methods of sewage disposal and treatment, and, in short, lends itself quite indispensably to one phase or another of the work of almost every department of the municipal administration.

General services of the laboratory.

Some of the most far-reaching measures for the promotion of the public health have not yet had time to accomplish results strikingly apparent in the statistics of the Parisian death-rate. The completion of the double water-supply, of the work of cesspool extinction, of the sewage-farm system, and of some other sanitary reforms, must, however, within a few years have a clear effect upon the bills of mortality.

Favorable effect upon death-rate.

A very remarkable decline of typhoid fever has already followed the measures of sanitary amelioration that have been pursued, so that the deaths from this cause in the decade from 1882 to 1892 were not nearly half as many as in the preceding decade, while in the most recent years the typhoid scourge has seemed to be nearing the point of extinction.

Decline of typhoid fever.

Public charity, centrally administered as one vast, unified department under the name of *L'Assistance Publique à Paris*, has absorbed and systematized almost every important form and agency of relief and succor. The charitable work of ecclesiastical and benevolent societies and of private individuals, large as it must be in the aggregate, lies in the background without much pretense of organization or

The work of public charity.

thoroughness, and is carried on with fewer establishments and institutions than one finds in English or American cities. To the Assistance Publique, with a large council of administration and a single executive head, belong (1) the great hospitals of Paris; (2) the homes, asylums, and retreats for the aged poor, the orphaned or friendless children, and special groups of the defective and dependent classes; and (3) the supervision and support of outdoor or domiciliary relief, whether in the form of medical attendance, temporary succor with money, food, or fuel, or regular and permanent aid at home in lieu of support in an institution. Overlapping of charitable work is prevented by this unified administration, and there results a more prompt and more universal alleviation of distress than could otherwise be secured, with a minimum of extravagance or abuse.

Scope of "assistance publique."

This huge consolidation of relief work is the outgrowth of several centuries of varied experience, and it reached its completed form in about the year 1850. The laws of the Revolutionary period had transferred the administration of hospitals and public charity from semi-ecclesiastical to purely civil and secular auspices. But hospitals and asylums remained for a long time under a management quite distinct from that of the ordinary distribution of alms or medical succor to the poor in their homes or at local dispensaries. The law of 1849 united all these forms of public relief in one general administration, although the various services are highly differentiated. Under the control and surveillance of the central Assistance Publique there exists in every arrondissement a *Bureau de Bienfaisance*, with headquarters in the mairie building; and in this bureau is concentrated the practical work of poor relief for the arrondissement concerned. Attached to it are the neighbor-

Consolidation of relief system.

The "bureaux de bienfaisance."

CHAP. I.

hood visitors, who know the people and are known by them, and through whom the deserving poor are likely to find prompt assistance. But I shall mention more particularly the bureaux de bienfaisance after describing the organization of the central Assistance Publique.

General organization.

The entire administration is under the authority of the prefect of the Seine and his superior, the Minister of the Interior, and is actively exercised by a single responsible director, who is nominated by the prefect and appointed by the minister. But the director is guided in all important matters by the advice of a council of surveillance, which is required by law to meet as often as once every fifteen days, and which may be called together as frequently as occasion requires.

A great charity board.

In the hands of this great board of public charity rests the policy that expends a yearly revenue of perhaps thirty million francs. The composition of the board is highly characteristic of the Parisian system. It has twenty members, including the prefect of the Seine and the prefect of police by virtue of their offices.

Membership of the body.

The prefect of the Seine is president of the board. Of the remaining eighteen, thirteen are delegates from other bodies, and five are directly appointed from without. The thirteen must include two members of the municipal council, two maires or adjoint-maires of arrondissements, two representatives of the local bureaux de bienfaisance, one representative of the Council of State, one of the Court of Cassation, a hospital physician, a hospital surgeon, a professor of the faculty of medicine, a member of the chamber of commerce, and a member of one of the councils of *prud'hommes*.

Representative system.

These various bodies present lists of candidates when places are to be filled, and the selection is made by the President of the Republic on recommendation of the Minister of the

Interior. The five remaining members are directly appointed. Membership in all cases (except those of the two prefects) is for a term of six years, and one third of the eighteen retire every two years, with indefinite reëligibility. The high character of this board is thus assured by the very nature of its composition. Under its enlightened surveillance every feature of the work of public charity makes steady progress, and every new scientific or sociological development finds just recognition.

It does not belong to my account of organization and of method to give a list of the splendid series of general and special hospitals, hospices, asylums, and retreats that are maintained by the Assistance Publique. But I may very properly remark upon the great expansion and improvement of the series in the period since 1872. All in all, they contain accommodations for about thirty thousand patients and inmates. One of the chief innovations of recent years has been the gradual but rapid transformation of the hospitals from a religious to a secular basis. The nurses and chief attendants until after 1881 were supplied by various religious orders. The municipal authorities have preferred to substitute their own regularly trained professional nurses for the members of the religious sisterhoods. Several training-schools were opened in connection with the great hospitals, and one by one the institutions have been completely laicized, until the *religieuses* are left only in a few places where their presence is expressly required by the terms of bequests and donations.

Hospitals and asylums

Laicizing the service.

The medical and surgical services of the hospitals and asylums are of the highest repute, and it greatly enhances a professional reputation to be connected with the hospitals. Admission to these services is based upon competitive examination, and the physi-

Medical and surgical organization.

CHAP. I.

cians and surgeons are content to receive very small pay. A great number of special laboratories are maintained in the hospitals, and every encouragement is given to the professional staff to make researches that will add to the world's knowledge of diseases and their treatment. To this end, also, a remarkable series of medical libraries is maintained, and a yearly appropriation is made to subsidize members of the staff who are detailed to pursue investigations in other countries. The instruction given in the schools for nurses is especially complete and thorough, and in a variety of ways the hospital administration lends itself to the advancement of professional skill and knowledge, and to the progress of scientific surgery, medicine, and hygiene.

High scientific standards.

The minute organization of the charity department makes it easy in practice to ascertain through prompt inquiries what applicants are entitled to free hospital treatment, what applicants are able to pay, what persons are entitled to free medical aid in their own domiciles, and so on. In general it is the accepted policy to admit to institutions none who can be cared for outside. For nearly all the purposes of this outside relief work, the Assistance Publique avails itself of the coöperation of the several bureaux de bienfaisance of the arrondissements. Each arrondissement has its corps of resident physicians attached to the service of *médical secours à domicile*. It is held to be an honor and a mark of professional prestige to serve the community in this capacity, and when a four years' appointment is to be made, the practising physicians of the arrondissement are all called together to elect a candidate by ballot. It is enough to remark of this system that it tends to secure for the poor in their homes an attentive and skilful ministry of medical relief. Midwives, in like manner, appertain to each bureau de bienfaisance.

Outside relief work.

"Médical secours à domicile."

The maire, it has been explained, sits as chairman of the arrondissement charity board, or bureau de bienfaisance, which has its offices in the mairie building, accessible to the whole neighborhood. Besides the maire the bureau is composed of twelve *administrateurs*, half of whom are appointed by the prefect and half by the municipal council, and who are re-eligible on expiration of their two-year terms. These official members of the bureau associate with themselves an indefinite number of well-disposed men and women willing to aid in household visitation of the poor; and these are known as *commissaires de charité* and *dames de charité*. For purposes of poor relief the arrondissement is divided into twelve sections, each one of which is assigned to an administrateur, who in turn may command the aid of several of the dames or commissaires de charité. Still further, in each arrondissement there are several so-called *maisons de secours* (houses of relief), which are headquarters of sisters of charity who minister to the sick and carry on at still closer quarters much of the practical work of the bureau de bienfaisance. I have endeavored to make it clear that the whole structure of the twenty Parisian bureaux de bienfaisance is so designed as to render it reasonably certain that in the actual relief of the poor the unpaid services of trustworthy neighbors may be secured, rather than those of perfunctory officials. It is also intended that the small districts may insure complete supervision and intimate knowledge of conditions.

The "bienfaisance" system.

Volunteer members.

Neighborly ministrations in small districts.

In recent years no part of the work of assistance publique has been more carefully developed than that which relates to the rescue, maintenance, and proper instruction of friendless children. It is possible that the low birth-rate in France has had something to do with the awakening of a special solicitude for every child of French parentage—a feeling that has be-

Care of friendless children.

CHAP. I.

come embodied in public policy. In the case of every unfortunate child, the State, as represented by the Assistance Publique à Paris, aims to be very much more than a grudging stepfather. Its efforts are destined to produce some interesting results in the field of the physical and mental training of children. Besides thousands placed in industrial schools and otherwise provided for, many thousands more are every year sent to country homes, where the authorities maintain a general surveillance over them. Thus, in any given year the Paris officials in charge of *enfants assistés* have on their active lists some thirty thousand children distributed as apprentices to farmers.

The city's wards in country homes.

The Assistance Publique à Paris has through legacies and gifts acquired a considerable endowment, and its income from invested funds is several million francs. It is also the recipient almost every day of new bequests or donations available for some part of its current expenditure. Many of the particular bureaux de bienfaisance also have endowment funds of their own. Moreover, there are certain special sources of revenue set apart for the charity administration, one of them being a tax of ten per cent. on the cost of all theater tickets and on the gross revenue of all places of amusement. This particular source yields a yearly charitable income of from three to four million francs. The municipal council votes annual appropriations, averaging about twenty million francs, to make the revenues of the Bureau of Assistance Publique equal to its necessities.

Sources of charitable income.

Tax on theater tickets.

Municipal appropriations.

In a remarkable variety of ways the Parisian municipality has in very recent years attempted to play the rôle of prompt friend and servitor to its people in times of emergency and special misfortune. The

Emergency services.

stations along the river and canals, and elsewhere in the central districts, for life-saving services and instant succor in cases of drowning or street accidents, form a well-known instance. Much less known, but far more important, is the service of night medical and surgical relief, organized in every neighborhood of the metropolis, and responding each year to a rapidly increasing demand.

Night medical relief.

Municipal lodging-houses have in the past been no part of the Parisian policy; but an experimental beginning was made in 1886, and there are now three institutions in service, two for men and one for women, with the prospect of a further development of the system. These Parisian lodging-houses (*refuges de nuit*) are absolutely free of all charge to their guests, French policy in this regard being entirely different from that of the British cities. Care is taken not to admit vagabonds or unworthy characters, the intention being to afford shelter to honest laborers who are seeking work. Such men are permitted to come for three successive nights. None are admitted who have not been residents of Paris for some time. The two establishments have a capacity of perhaps six hundred per night. Their facilities for laundry work and disinfection are complete, and each guest is provided with a change of clothing while present. Soup is served at night, and bread is given to every one in the morning. All possible assistance is lent in the quest for employment. Thus, in the course of every year the city dispenses hospitality to thousands of honest men in temporary need.

Municipal lodging-houses.

A generous hospitality.

The lodging-house for working-women is of a different character, inasmuch as it allows necessitous women to bring children with them, and affords them shelter and care as long as the exigency requires, the average sojourn being nearly a month. Until

A transient home for working-women.

CHAP. I.

they can obtain employment elsewhere they are given something to do in the lodging-house. Those who enter this place are, in good faith, women who are accustomed to earn their own living by honest labor.

Subventions to crèches.

By subventions from the municipal treasury the city council aids in the maintenance of the numerous crèches which render free service to so many working-women of Paris. Another interesting form of aid which the city council promotes very liberally is the advance of rent-money in cases where worthy families, through illness or other misfortune, have been evicted by their landlords, and have no means with which to engage a new domicile. This, obviously, is a kind of charity that calls for great discretion. But through the minute and thorough organization of the bureaux de bienfaisance it is quite possible to render such aid, as a temporary loan in deserving instances, and to withhold it where its application would be unwise. From fifteen to twenty thousand families each year are helped in this way.

Advance of rent-money.

An agricultural colony.

In 1891 the municipality began the experiment of an agricultural colony on a farm that it had acquired at Chalmelle, in the department of Marne. It had found among Paris paupers a considerable element of men who had come to the city from the rural districts, and had gone completely to the wall. The agricultural colony is proving to be the best place for such men, and the experiment is to be extended so as to embrace families (single men only have heretofore been admitted), and separate cottages with gardens are to be allotted to such families. It is expected that the farm colony will serve as the doorway through which many men that have failed in the city can be successfully reabsorbed into the agricultural life of France, or else equipped for a new start in one of the French dependencies.

The policy to be extended.

Free bureaus of employment are now maintained in the mairies of most of the arrondissements of Paris, and the municipal council votes a subvention each year toward their support. Private citizens who have the time and means, and who are generously disposed toward the workingmen of their neighborhoods, give much voluntary, unpaid service to the management of these local labor exchanges. The results are beneficent in various ways. As a crowning evidence of its devotion to the cause of labor, the Paris municipal council determined, in 1886, to establish a great *Bourse du Travail*, or central labor exchange. This institution was completed and opened in 1892, about two million francs having been expended upon it. It became at once the headquarters of all the trades-unions and labor bodies in Paris, not less than eighty-two trades being represented through the appointed agents of their societies. The municipal council votes fifty thousand francs a year toward the maintenance of the institution, and it is believed that the Bourse will prove in many ways promotive of the well-being of Parisian artisans, and of the industrial and commercial progress of the metropolis.

Free employment offices in the mairies.

The central labor exchange.

Municipal subvention.

Such an official recognition by the municipal government of the organized workingmen's bodies, it should be remembered, grows out of a French policy the roots of which sink deep into the practices of the middle ages. Under the old régime all matters affecting wages and industry were settled by the tribunals of the trades guilds and merchant bodies. These corporations disappeared in the vortex of the great Revolution; but, as to some of their attributes and functions, they were virtually reëstablished in the early days of the present century in the form of tribunals of commerce and *conseils des prud'hommes*. In all large towns the municipal government became

Government and labor unions.

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responsible for the support of these special tribunals for the prompt adjustment of differences arising in the course of trade and industry. In the conseils des prud'hommes the employers and the workingmen are allowed exactly equal representation. The system inevitably encourages the organization of distinct trades and crafts in unions. The prud'hommes in Paris are in four distinct councils, one of which belongs to the building trades, one to textile industries, one to chemical and kindred manufactures, and one to metal industries and miscellaneous crafts. From twenty-five thousand to thirty thousand cases are brought before these Paris prud'hommes every year, — most of the cases relating to differences about wages, — and the great majority are promptly adjusted by conciliation without appreciable cost. It would seem likely that the erection of the new labor bourse would tend to the strengthening of such commendable agencies as the conseils des prud'hommes, and that it would also contribute toward the solution of the problem how to prevent strikes.

Councils of "prud'-hommes."

Organization at Paris.

It is worth while to mention the fact that the municipal council several years ago voted to allow associations of workingmen to make bids for public work let by contract, thus in a still different way recognizing the labor organizations, while offering encouragement to coöperative efforts.

Trades unions may bid for public work.

No department of local administration has entered more thoroughly into the customs and the life of the common people of Paris than the *Mont-de-Piété*, or public pawnshop. It is a venerable institution, for it was first established in 1777. But it has so adapted its methods to changing conditions that no one would think of considering it obsolescent or antiquated. On the contrary, it was never so strong or so vital as

The public pawnshop.

in these last years of the nineteenth century. The services that it renders the great Parisian community are exceedingly creditable to the humane instincts and sound business sense that have made modern French administration superior in its conservation of the popular wealth.

Objects of the mont-de-piété.

The mont-de-piété was established to protect the people from the usurers. Private pawnbroking was obviously a public evil, an aggravation of poverty, and too often an ally of all sorts of crimes against property. At the outset the new venture was placed under the auspices and control of the hospital and charity administration. It was signally useful during the period of economic disturbance that attended and followed the great Revolution. Its plan from the first has been to receive interest-bearing time deposits, somewhat like a savings-bank, and to use the money thus obtained in loaning upon chattels. Its object has not been to earn net revenues, although it has always allowed a safe margin of profit, and has thus accumulated ample reserve funds, besides providing itself with suitable buildings and appliances.

General method.

Branches, and volume of business.

Besides a great central establishment and three large auxiliaries, the mont-de-piété possesses twenty branches, in different parts of Paris, for the convenience of the people of the various quarters. The number of articles upon which loans were made for the year 1892 was 2,276,149, and the amount loaned was 60,765,917 francs. Thus the public pawnshop, upon the average, makes a loan each year of about 25 francs to every man, woman, and child of Paris.

Rates for loans and deposits.

Formerly the loans were made at the rate of 9 per cent. per annum, with a small added charge of appraisal, etc., and 4½ per cent. was paid upon yearly deposits. But beginning with 1885 there have been gradual reductions until borrowers have now to pay

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only at the rate of 6 per cent., with a fixed charge of 1 per cent. to cover insurance upon the articles pledged and certain other expenses. The mont-de-piété is able to secure all the money it requires at 3½ per cent. upon yearly deposits, and 2½ or even 2 per cent. upon deposits for shorter periods.

Benefits to small borrowers.

A great advantage to the poor that arises from the public monopoly of pawnbroking is the low rate upon small loans. Obviously, at the 6 per cent. yearly rate all very small loans (and the mont-de-piété lends as small a sum as 3 francs) are made at a loss to the institution. That is to say, if it were not for the profit upon the half-million largest loans, it would be impossible to make the remaining two million loans at the existing rate. Loans smaller than 22 francs are made at a loss, even though they are outstanding for years. Loans of 85 francs are profitable, even if they are made for only one month. Some profit is made on all loans of a larger amount, no matter how short the time. But since the average of all loans is from 25 to 30 francs (the average varying year by year), it is evident that the great majority are made at a loss, and that the mont-de-piété is thus a boon to the poor.

Profits only on large loans.

Removal of maximum.

Formerly there was a limit fixed upon the amount that could be borrowed by any one person; but this limit has now been removed, experience having shown that the institution is financially strong enough to meet all possible demands, and that the increase of large loans makes it the easier to give advantageous terms to the small borrowers. This removal of the maximum has greatly increased the usefulness of the institution to merchants and business men.

In 1892 an innovation was adopted which has already been attended with the most satisfactory results. This was the loaning of sums not to exceed 500 francs

upon stocks and bonds. To appreciate the significance of this step it should be remembered that public loans in France are issued in bonds of small denomination, which form the favorite investment for the savings of employees, artisans, small shopkeepers, and thrifty servants. Many people of this class, for example, own one Paris municipal bond or Crédit Foncier bond of 400 or 500 francs. The Bank of France had always adhered to the rule of making no loans smaller than 500 francs. Private money-lenders could not always be relied upon to deal equitably with the borrower of small sums on shares of stock. The mont-de-piété now grants loans on this class of securities at 6 per cent. to a grateful constituency.

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Loans on stocks and shares.

Usefulness of this innovation.

As an illustration of the service rendered by this new department of the mont-de-piété, let us suppose that Jacques owns one share, or *titre*, of Paris municipal stock, and that he has further accumulated 300 francs in the municipal savings-bank at a time when a desirable new loan is issued by the municipality, in which Jacques has a laudable ambition to invest. Such is his aversion to the high rates and devious ways of private money-lenders that he would not have ventured to hypothecate his precious titre in order to obtain 100 francs. But he has perfect confidence, as every Parisian has, in the mont-de-piété. He deposits his titre, borrows his 100 francs, withdraws the 300 from the savings-bank, goes to the mairie of his arrondissement, and secures his new 400-franc city bond. As soon as he has saved 100 francs he redeems the pledged titre; and the accommodation has cost him only half a franc per month. Obviously, this arrangement is promotive of private thrift on the one hand, and stimulative on the other hand of the popular market for municipal bonds and various public or quasi-public securities.

How it works in practice.

This public monopoly of pawnshops, far from abet-

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ting theft, has proved a chief agency in helping the police authorities to detect and prevent stealing. It is said that about 360,000 watches are received as pledges every year by the Paris mont-de-piété, and that only about 250, or 7 in every 10,000, prove to have been stolen. This is an amazing record; yet it is further true that the mont-de-piété receives three times as many stolen watches as all other stolen articles put together. These figures express the results of a system of vigilant and painstaking coöperation between the mont-de-piété and the police authorities that would require pages for any detailed description.

Infrequency of stolen pledges.

The mont-de-piété is under the responsible management of a single director, with an elaborate organization of subordinates. Its affairs have the surveillance of a council of administration of which the prefect of the Seine is ex-officio president, the prefect of police being also a member. Besides the two prefects, there are nine others, of whom three must be members of the municipal council, three must be connected with the Assistance Publique or the bureaux de bienfaisance, and the remaining three must be citizens of Paris, and may or may not be holding other official positions. The appointments are for six years, three members retiring biennially. Vacancies are filled by the Minister of the Interior, who designates his choice from a list of three names presented by the prefect. The active director is selected in the same way. The council, as constituted in practice, is thoroughly representative of the official municipal life of Paris, and the mont-de-piété is thus kept in close and harmonious relationship with the central authorities of the Hôtel de Ville and with the neighborhood administration of the arrondissements and the mairies.

Make-up of the mont-de-piété council.

A good system of savings-banks is much more than a convenience to the prudent and economical of a

community. It is a powerful promoter of thrift, and a constant enemy of extravagance and improvidence. The multiplication of savings-banks throughout France — municipal and private systems as well as the branches of the national postal system — is a factor of prime importance in the conservation of the national wealth. Paris is elaborately served by a series of branches belonging to this national system (Caisse d'Épargne Nationale); but it has also a distinct municipal system of earlier date and of still greater local importance. The Caisse d'Épargne et de Prévoyance de Paris, as the local system is called, is managed by an appointed board of directors who serve without pay of any kind, and who are chosen from among the most distinguished financiers of Paris. Besides its great central establishment in the Rue Coq-Héron, it has branches in the mairies of the different arrondissements and in the suburban communes. It has, in all, forty places of business, for the convenience of the people of the greater Paris. The number of individual accounts increases every year. There were 582,000 at the beginning of 1890, and this number had increased to nearly 630,000 at the opening of 1893. Thus one person in every four of the population keeps an account in the Caisse d'Épargne. The total amount deposited was nearly 160,000,000 francs on January 1, 1893, and the average credit was 250 francs. Nearly half, however, of the depositors had accounts of less than 25 francs.

The savings-banks of France.

Two systems in Paris.

The Caisse d'Épargne and its forty branches.

These statistics do not include the business of the Paris offices of the national savings-bank system. This branch of the postal administration is comparatively young. In 1882 its total deposits at Paris were only seven million francs, while in 1892 they were, in round figures, sixty-eight million six hundred thousand francs. The average credit of each deposi-

National postal savings-banks at Paris.

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tor in this national postal system, which uses the branch post-offices of Paris as depositories, is much smaller than in the municipal system, but the actual number of patrons is about as large. Thus it would appear to be a very conservative reckoning to place the number of individual Parisians who have savings-bank credits, under one system or the other, at more than a million. The funds are invested for the most part in public securities; and the interest paid to depositors, which was formerly at a higher rate, is now generally at three, three and one fourth, or three and one half per cent.

A million Parisian depositors.

As long ago as 1875 the savings-bank feature was introduced into the elementary schools of Paris; and since that time about two hundred and twenty-five different schools have, through their teachers, taught practical thrift by means of pupils' branches (Épargne Scolaire) of the Caisse d'Épargne de Paris. The sums that poor children at school can deposit in savings-banks are almost infinitesimal, and the system is carried on for the educational value it seems to possess. Nevertheless, the Épargne Scolaire now collects about one hundred and fifty thousand francs a year; and from 1875 to 1893 it had paid over to the main institution about two million francs of children's deposits.

School branches of the municipal savings-bank.

Though it is only a minor incident in the work of the Parisian school system, the Épargne Scolaire is significant as pointing to the exceedingly practical relation elementary instruction is made to bear in Paris toward the part that the citizen must play in life. Indeed, if I were asked what, upon the whole, I considered the largest, most modern, and most essentially characteristic of all the departments or undertakings of the Parisian municipal authorities,

Education as the foremost task of the Paris municipality.

I should be inclined to ascribe first place to the work of public instruction. The new policy began with the present republic, at the end of the Franco-Prussian war. In 1873 five or six per cent. of the young Parisians examined for military duty were absolutely illiterate. In 1893 the illiterates had fallen below one per cent. Elementary instruction before 1870 was, for the most part, under ecclesiastical auspices, and it was ill supported and wholly inadequate. The religious orders still maintain their separate educational work, and there are also many private schools; but the regular system of secular municipal public schools has vastly outgrown all rivals. Education, between the ages of six and fourteen, has been absolutely compulsory in France since 1881, and also perfectly free. Not only is instruction given without charge, but books and all other materials are freely supplied.

Development of free public schools.

For the smallest children there exists a system of so-called maternal schools (*écoles maternelles*), which are, in effect, kindergartens. Attendance is not compulsory, but it is free; and these schools are so delightfully conducted that they are an inexpressible boon to the families of the poor. There are about two hundred of these free maternal schools in Paris, with from fifty to sixty thousand little pupils under six years of age. To bridge the somewhat abrupt transition from the tender and indulgent methods of the mistresses of the écoles maternelles to the more formal and rigid system that prevails in the regular primary schools, it has been found well to establish a system of so-called *enfantile* schools for children between six and eight. These are only for the more timid, sensitive, or backward. They serve an admirable purpose for thousands of children every year.

The maternal schools.

The "écoles enfantiles."

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The regular primary schools.

Of course the main feature of the school system is the series of primary schools. For the year 1892 there were more than one hundred and fifty-six thousand children in these primary schools, of whom eighty-five thousand were boys and seventy-one thousand were girls. The number of schools was approximately four hundred, of which half were for boys and half for girls; and besides some four hundred principals, almost equally divided between men and women, there were more than two thousand six hundred teachers, of whom half were men and half women.

Total school attendance.

In private schools, clerical and otherwise, there were 91,500 children. Thus, including the écoles maternelles and the public and private primary schools, there were nearly 310,000 children enrolled in the Paris schools in 1892,— not counting those in the secondary, special, and higher institutions. More than 61,000 of the scholars attending private schools were girls. The gain of the public schools has been constant, and the parochial institutions, conducted by the religious orders, seem destined to decline from year to year.

The strictly educational aspects of the work and methods of the Paris schools are certainly worth attention, but their detail does not belong to my present theme. Since, however, these schools are the prime solicitude of the municipal council, and deemed by all the local authorities as at the very heart of the work of the municipal government, I may properly note some of their special features. And first it may be explained that the schools of each of the twenty arrondissements fall under the general care of an arrondissement commission, over which the local maire presides, the other members being appointed by the municipal council, excepting that the Académie has a representative. The whole system is held together

Organization of school system.

and assimilated under a scheme of governmental inspection and management. It is enough to say that the municipal council, the prefectoral administration, and the national ministry of education provide all the necessary oversight; while in the arrondissements and the school districts themselves there are local organizations that bring the citizens and the parents into close and active relations with the public schools. Under these circumstances it has been easy to carry out a series of very interesting innovations.

Various innovations.

One of these new things is an elaborate service of medical inspection. Perhaps one hundred and fifty physicians are connected with this service, and they visit all schools regularly and frequently to report upon general sanitary conditions, to watch for cases of contagious disease, and to care for any children needing medical attention. Medical school dispensaries have now also been recently established in most of the arrondissements, as an extension of the earlier service of attendance and inspection, and school baths have in a number of instances been opened.

Medical inspection of schools.

Dispensaries and baths.

A particularly attractive and humane experiment, begun in 1889, has proved itself a bright success. This is the system of *garderies*, or *classes de garde*, for small children whose parents are employed away from home during the day. In many cases — the instances were numbered by the thousand — young pupils were released at four, while their parents could not return from their work for two hours or more. Such children are now kept in custody by some one connected with their school, are allowed to play under safe conditions, and are sent home at the proper hour. In some arrondissements the garderies assume charge of such children in the morning as well as at night; and they are always responsible for the safe-keeping and the happiness of their infant clientèle on each Thurs-

The "garderies" experiment.

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day holiday. In 1891 there were 72 of these garderies, with 4318 children under their care; and the numbers have much increased since that time.

Warm meals at school.

A far more expensive experiment, though not less firmly established as the result of experience, is that of providing a warm noon meal at school for the benefit of poor children who would otherwise have little or nothing to eat during the school day. Many children go to their homes for the noon meal, but the majority remain at school. The *cantines scolaires* provide warm meals gratuitously to those whose parents are not able to pay, and charge others at the rate of ten centimes (two American cents, or one English penny) for each meal. A uniform ticket system is used in such a way that the children themselves cannot recognize any distinction between those who are fed gratuitously and those who pay. The system was begun in 1882, and it has grown steadily in favor and support. In 1891 there were between eight million and nine million meals served, considerably more than half of them (nearly sixty per cent.) being gratuitous. The plan rests too firmly upon common sense to be abandoned. Physical as well as mental development is the object of the schools, and in any case free textbooks and good instruction would be wasted upon a poor child suffering from the bitter pangs of hunger.

An established success.

The school treasury organizations.

Obviously, the teachers could not manage all these extra services without much outside assistance. In point of fact, the cantines scolaires, or school restaurants, are in charge of auxiliary organizations known as *caisses des écoles* (school treasuries). Originally the caisse d'école was an informal association of the adult friends of a particular school, each member of which contributed a few francs a year for prizes, for acts of charity to poor children, and for various purposes promotive of the excellence of the schools and

the well-being of the children. But so valuable did they prove themselves that they were some years ago recognized and established by law. The municipal council subsidizes them heavily, and makes them responsible for a constantly increasing number of services. The governing board of each caisse contains several ex-officio members, including the local maire and other functionaries; but the members themselves elect from their own body a controlling majority of the board.

Established by law.

It is through the caisses des écoles that parents of school-children, and all other friends of elementary education, find their best opportunity to come into contact with the life and work of the schools. Each regular member contributes a fixed yearly fee, usually ten or fifteen francs; while an order of life members, called founders (*fondateurs*), includes those who have paid in advance a specified sum, usually ranging from one hundred to two hundred francs. Then there are the *donateurs* (donors), who subscribe from year to year without being held to any definite amount. The sum total of the fees, together with the amounts that are raised by concerts and entertainments of various kinds, gives each caisse a considerable fund of its own. The managers of the caisse are able to ascertain accurately the circumstances and home conditions of every child in the district. Out of their fund they see that shoes are provided for those who need them, and, in fact, that all school-children are comfortably and decently attired. They possess the knowledge which is required for a wise distribution of the free meal tickets. They are also in a position to determine what children require the kindly attentions of the garderies. Moreover, in many instances the good offices of the school caisse are carried into the homes of poverty to relieve sick parents.

Sources of income.

Their various good offices.

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Municipal promotion of children's sports.

School vacation trips and camps.

Boarding-schools as a new feature of the system.

Rapid increase of the "internats."

Upon this excellent foundation other social services to poor and deserving children have been undertaken by the Paris municipality. Thus, a number of directors of sports are regularly employed, and on holidays in the parks and playgrounds the young Parisians are now being officially inducted into the kinds of outdoor games and exercises that only a few years ago they knew so little about. Every year the city council votes a handsome sum of money to pay for the management of school vacation trips into the country; and an important system of school camps and colonies has been established, its object being to send a large number of sickly children of the working-class into the country in summer.

In 1882 — the year from which date most of the recent developments and innovations in the French school system — it was determined to introduce the boarding-school feature into the Paris schools, for the benefit of widowers or of other parents or guardians whose occupations made it difficult to maintain a suitable home environment for small children. Six hundred francs a year was found to be the cost of boarding and clothing a child in one of the *internats primaires*, and the municipality consented to pay the remainder if thirty-five francs per month were advanced by the parents or guardians. In 1892 this payment was reduced to ten francs or twenty francs, according to the pecuniary circumstances of the persons responsible for the child. At the beginning of 1893 there were seventy-five of these internats, giving homes to about a thousand school-children between the ages of six and thirteen. Under the new ten-franc and twenty-franc monthly rates, the number has increased very materially, and in 1894 the municipality appropriated approximately one million francs to pay its share of the cost of placing some two thousand children in the internats primaires.

The municipal council and the educational authorities have recognized the necessity of regular physical culture as well as of outdoor sport and recreation; and they have made the gymnasium, under professional instruction, a universal feature of the Paris schools. Manual training, also, in the use of common tools has been recognized for its educational value and for its practical bearings, and there are nearly 150 ateliers or workshops connected with the boys' elementary schools, in which regular instruction is given. Meanwhile, the girls receive corresponding instruction in needlework and the domestic arts.

The gymnasium in all schools.

School workshop for manual training.

An attempt is made to give very special attention to music in all the elementary schools. But it is the system of instruction in drawing and design that is most noteworthy. No effort or expense is spared to awaken the art instinct and to develop some degree of technical skill in the future artisans of Paris.

Music and drawing.

But it is in the continuation schools that the practical purpose of the municipal authorities is most plainly evident. Manual training, the rudiments of design, familiarity with common tools,— these can be taught in the primary schools; and Paris since about 1880 has expended many millions of francs in establishing these new departures in elementary education. From the primary school the pupil may at thirteen go into a trade as an apprentice, and provision is made for the continuance of his studies either in half-day classes or in night-schools. If he is destined for a scholar, for a place in the civil service, or for a calling that requires further intellectual training, he may go into one of the *écoles primaires supérieures*, or public high schools. These are admirable institutions, which need no description here. But if, on the other hand, the pupil be destined for a skilled trade, there is ready for him a series of magnificent *écoles professionnelles municipales*, which furnish technical education of the most

The high schools.

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Technical education.

The special trade schools.

Relation of these schools to Parisian prosperity.

desirable character, adapted directly to the trades that are prosperously domiciled in Paris. One of these schools (École Diderot) is devoted to the group of trades that pertain to the working of wood and iron; another (École Bernard-Palissy) to the decorative arts —*i. e.*, to the application of fine arts to industry; still another to the trades that rest upon applications of chemistry and physics; another to the furniture and upholstering industry; another includes all such callings as printing, lithography, bookbinding, photography, photogravure, and the many new mechanical branches of the reproductive arts; and there are still others. Besides the group of technical schools for boys, there are several for girls, in which dressmaking, millinery, and various other industrial arts, as well as the domestic ones, are thoroughly taught.

American and English visitors at the Exposition of 1889 will remember the remarkable display of the Paris industrial schools, especially in lines of decorative manufacture and art. It is in these schools that Parisian dressmakers, milliners, artificial-flower makers, furniture designers, house decorators, skilled workers in metals, and handicraftsmen in scores of lines of industry are educated to do the things that keep Paris prosperous and rich. The Exposition of the year 1900 will have much more to present; for these technical schools are constantly improving under the fostering care of the municipal government. It is public money wisely spent that maintains such an educational system. I need not refer to the higher schools of science, of classics and literature, and of engineering. All the flowers of civilization are encouraged by the Paris municipality.

No complete impression of the extent to which instruction in the practical arts is carried by the Parisians could be given without some mention of the great

number of popular societies and non-governmental agencies which are engaged in furthering the scientific, commercial, and industrial education of adult workers. Some of the largest of these societies — for example, the Association Philotechnique — are subsidized by the city council. This particular association, founded in 1848, enjoys in its free night courses the unremunerated services of more than five hundred accomplished professors drawn from the various higher educational institutions that are centered at Paris. The state and the municipality give the use of school buildings, and various public bodies make grants and donations to aid the cause. More than ten thousand adult workers are taught every year in the admirable special courses of the Philotechnique. Then there must be mentioned the Association Polytechnique, which is more independently conducted by the workingmen themselves, and which has about twenty-five sections in Paris, with more than four hundred courses, taught by talented men of all callings and professions, who are glad to give their services. The Union Française de la Jeunesse, a third of these associations, enjoys official aid and recognition, and carries on several hundred classes in Paris every year. And besides these there are scores of smaller societies whose educational work in the aggregate counts for a great deal. Thus, scores of thousands of the working-people of Paris are enjoying some measure of instruction that tends to improve the artistic and technical character of their products.

Voluntary societies for technical instruction.

Association Philotechnique.

Association Polytechnique.

Other kindred movements.

In many industrial neighborhoods of Paris there have been opened, since 1886, special workingmen's libraries of industrial art. Lecture courses are provided in connection with these libraries, and costly works are loaned to artisans for home study. The experiment is accounted a most satisfactory one in its results. It is under direct municipal management.

Libraries of industrial art.

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Indeed, in few directions has the municipality of Paris been more active during the past decade than in the promotion of libraries. Paris happens to contain, besides the national library, two or three great reference collections of books; and the recent movement has not been so much in the direction of centralized aggregations as in that of convenient small libraries, with reading-rooms, scattered throughout the city. The schools are all supplied with their own libraries, of which more or less use is made by parents as well as scholars. In every school building there is a collection of the reference books that teachers are supposed to need; then a second collection embraces works of reference for pupils, while a third department of the school libraries includes carefully chosen books to be lent to the pupils for home reading.

Activity in the library movement.

The school libraries.

But the notable thing has been the development of the system of free municipal libraries for popular use in all the quarters of Paris. In 1878 there were about a half-dozen municipal libraries kept in the mairie buildings of as many different arrondissements. But they were little known and scarcely frequented at all. It was in that year that the central municipal authorities determined to make Paris a city of public libraries. In a year or two each arrondissement had become an active library center, and the policy of opening additional public libraries and reading-rooms in the school buildings was then adopted. In 1883 these municipal libraries numbered twenty-six, while in 1893 they had grown to the remarkable number of sixty-six. They are open in the evening and at other hours convenient for working-people, and they have become a powerful factor in the educational and home life of the Parisian people.

The sixty-six municipal libraries.

A central bureau exercises general oversight, and keeps the library system in harmony; while local

Central library bureau.

boards in every arrondissement exercise ordinary control, select the books to be purchased, and promote the general usefulness of the libraries of their own district. The local maire, his adjuncts, the four members of the municipal council from the arrondissement, certain school and other officials, and a group of appointed citizens form the arrondissement library board.

Arrondissement boards.

There are, besides the municipal libraries, about twenty useful free public libraries under the auspices of a private association, which are partly supported by yearly grants from the municipal treasury. Thus, including the libraries of industrial art, which are under full municipal control, the Paris authorities are in possession of a system of about one hundred small but exceedingly useful free lending libraries, domiciled in every part of the city. These have by no means begun to approach the maximum of their influence, for the Parisians are only now forming the habit of library patronage; but they are lending more than two million volumes a year, of which less than half are works of fiction.

Library system summed up.

The policy of municipal Paris for the promotion of the fine arts might well be studied by the practical administrators of other countries. It has not been easy for English cities, and it has been still more difficult for American municipalities, to perceive the immense commercial benefits that may accrue from a generous cultivation of the esthetic arts. The national French government maintains its world-famed art-schools; the Parisian local authorities patronize art in a variety of ways; the greatest artists and most accomplished connoisseurs are brought into the service of the national or the municipal government as members of commissions which supervise art instruction, pass upon plans for the architecture and

Parisian policy toward the fine arts.

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decoration of public buildings, award prizes in art competitions, select pictures for public galleries, and pass judgment upon designs for public monuments or statues.

Preëminence in art sustained at small expense.

The appearance of great activity in all these matters has naturally enough created an impression in the minds of foreign visitors that French public expenditure on account of the *beaux-arts* must be upon an extremely lavish scale. This impression, however, is wholly erroneous. It is a very moderate demand, comparatively, that art makes upon the public revenues. The conspicuous results are due to the fact of a continuous policy, which is so wisely adjusted that a yearly minimum of cash outlay results in a maximum of encouragement to art, and suffices to turn the balance in favor of Paris as the art center of the world.

The fine art fund.

Before 1870 the municipal credit of 250,000 francs a year for the encouragement of art was, for the most part, expended upon pictures or other adornments for the great churches of Paris. But since the establishment of the republic a broader policy has been pursued. Especially since 1880 there has been a wonderful outburst of enthusiasm and of genius in the painting of appropriate mural designs for the series of civic buildings. The mairie buildings of the twenty arrondissements — in which, as I have already explained, the administrative tasks of the municipality have their working centers — have, for the most part, been rebuilt or enlarged since 1872; and the fine-art fund has secured for them many noteworthy mural paintings of historical or allegorical significance, the subjects being suggested by the local surroundings, or by the uses of the rooms decorated. In like manner the school-buildings are re-receiving noble decoration, and every worthy phase

Mural designs for civic buildings.

of the life and history of Paris, ancient and modern, is finding expression on the walls of public buildings. The artists are commissioned under circumstances which, while helping many a rising young artist to gain position and prestige, also secure the largest possible amount and variety of work for the sum that has been set aside. Of course the greatest of the French painters have been glad to put their services at the command of the authorities, for very modest compensation, to aid in decorating the new Hôtel de Ville, the new Sorbonne, and other of the chief public buildings. The sculptors have been no less constantly recognized, by similar methods. A certain sum is always expended every year by the municipal authorities in the purchase of new works from the various salons and exhibitions.

Mode of expenditure.

It was in 1816 that the municipal service of the fine arts was established, and in 1875 it was determined to prepare and publish an inventory, or explanatory catalogue, of the works of fine art of all kinds that had been accumulated by the municipality. That catalogue had, up to 1892, cost more than one hundred thousand francs, and it still calls for a yearly appropriation. A number of magnificent volumes have appeared in the series, and an inspection of them would convey some faint idea of the marvelous wealth of art objects and architectural monuments that has accrued to the Parisian community through a policy of encouragement and acquisition intelligently followed for eighty years.

A municipal art inventory.

This willingness to spend some thousands of francs to record the history of the fine-art development of Paris is, indeed, characteristic of a general policy that was entered upon some years ago. The service known as that of the *Travaux Historiques* was begun in the decade before the war with Germany. But it

The "Travaux Historiques."

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was not until after the war that it took its present form as one of the regular branches of the municipal administration. This service comprises three principal parts. First, it maintains the Carnavalet museum and library, devoted to the preservation of objects of archæological value, and to the collection of manuscripts and books pertaining to the history of Paris. Second, it has charge of the preparation and erection of commemorative tablets,—of which a hundred or more have been placed since 1879,—to mark historical spots like the site of the Bastille, or to designate houses or localities associated with the names of famous men. Third, it promotes investigations in special fields of Parisian history and publishes the results.

Carnavalet museum.

Commemorative tablets.

It is this third function of the historical service that is most noteworthy. I have endeavored, in my account of the work of the Paris municipality in the period since 1873, to make it clear that its devotion has not been solely or chiefly to ostentatious material projects,—to boulevards, ornate façades, or showy monuments. But nothing, as it would seem to me, more satisfactorily illustrates the thorough and genuine quality of the civilization that dominates these Parisian circles of government than the faithful support for more than twenty years given to the scholars and savants who are preparing *L'Histoire Générale de Paris.*" Especially to be praised are their noble volumes devoted to the Paris of 1789,—so invaluable in their preservation for future ages of the facts concerning the streets, buildings, and manifold conditions of the city at the beginning of the Revolution. But many elaborate studies relating to earlier periods in the history of Paris have also been published, and each year adds two or three new ones to a collection that now numbers perhaps fifty volumes. From 1873 to 1896 the municipal council had appropriated about

The "General History of Paris."

Magnitude of the undertaking.

two million francs for the carrying out of this scheme of historical inquiry and publication. The money has not been extravagantly spent, and the project has been creditable to the Parisian sense of municipal dignity and historical pride.

These historical labors are, for administrative purposes, brought under the auspices of the same bureau that is charged with the service of fine arts. The general chapter-heading of "Architecture and Fine Arts" in the yearly budget includes outlays for a number of services that are grouped together in the practical organization of the prefect's executive staff. Under this category falls the yearly outlay of 300,000 francs for the celebration of the national holiday, July 14; a subvention for the encouragement of musical compositions is also included; and to indicate the wide and catholic range of the municipal patronage, it should be mentioned that through this bureau is expended the 70,000 francs which the council votes every year as its contribution toward the encouragement of horse-racing, most of this sum being devoted to the well-known *Grand Prix de Paris*, to which the municipality has subscribed since 1872.

Outlay for the national holiday.

Subscription to the "Grand Prix."

The value of a thoroughly-organized statistical service can be appreciated, perhaps, by some practical minds which would hesitate to approve the expenditure of municipal funds upon recondite historical inquiries. The statistical office of Paris until recent years was not as highly developed or as well supported as it ought to have been; and even yet it does not occupy so conspicuous a position in the administrative life and work as, for example, that of Berlin. But it has attained an excellent standing, and its reports are admirable examples of statistical compilation. A distinguished specialist is chief of the statistical office, and he is supported by a commis-

The statistical bureau.

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sion whose members appreciate the important relation that statistical science must henceforth bear to progress in every field of public administration.[1]

The municipal finances.

As the foregoing description of municipal developments and activities has proceeded from one point to another, it has been made plain that immense financial operations were involved. The projects which have been reviewed in these pages could not have been accomplished without the accumulation of a vast municipal debt. Nor could the current expenses of so elaborate an administration be met without the collection of a very generous yearly revenue. It remains therefore for me to give some account of the financial condition and methods of the Parisian municipality.

A debt of two billion francs.

The debt of Paris amounts at the present time to nearly two billion francs. This huge obligation is represented by the great public works of Paris, including the modern system of streets and boulevards, the water-supply, the drainage works, the parks and

[1] Dr. Jacques Bertillon is chief of the Paris statistical service. It may be of interest to present the list of members of the commission, not only because of what it reveals as to the distinguished character of the men who serve upon this important board, but also because it represents very fairly the personal quality of many other advisory boards and commissions, that are bringing the highest professional abilities into the service of municipal Paris. The following twenty-eight gentlemen constituted in 1894 the *Commission de Statistique Municipale:* Eugène René Poubelle, préfet de la Seine; Léon David Bruman, secrétaire général de la préfecture de la Seine; Jacques Bertillon, docteur en médecine, chef des travaux de la statistique municipale; M. Bezançon, chef de division à la préfecture de police; Adolphe Bloch, docteur en médecine, médecin-adjoint de la préfecture de la Seine; M. Chautemps, docteur en médecine, député de la Seine; Arthur Chervin, docteur en médecine; M. Cheysson, inspecteur général des ponts-et-chaussées, professeur à l'École des Sciences Politiques; Jean Jules Clamageran, sénateur; Émile Ferry, maire du IXe arrondissement, ancien député de la Seine;

their improvement, the new Hôtel de Ville, the prefectoral and mairie buildings, several hundred new school-buildings, many other pieces of public architecture, the magnificent embankments of the river Seine, the series of beautiful and indestructible bridges, the great markets and entrepôts, including the municipal slaughter-houses and cattle-yards, and a host of other investments of a permanent and creditable nature, many of which I have already described. The critics of the financial policy pursued under the prefecture of Baron Haussmann have brought together an array of facts and arguments which show it to be undoubtedly true that extravagance and corruption to some extent characterized the methods of that period of rapid transformation and of accompanying excitement and speculation. Nevertheless, I am of opinion that the modernization of Paris has, in the main, been soundly and ably financiered, and that no very appreciable percentage of the outstand-

Represented by public improvements.

The question of extravagance.

M. Girard, chef du laboratoire municipal de chimie; M. Jacques, député de la Seine; Jean Adrien Jaubert, docteur en médecine, inspecteur de la vérification des décès; Pierre François René Lafabrèque, ancien directeur de l'Hospice des Enfants-Assistés; Alfred Martial Lamouroux, docteur en médecine, membre du conseil municipal de Paris; M. Lemoine, ingénieur en chef des ponts-et-chaussées; Augustin Henri Antonin Le Roux, directeur des affaires départementales à la préfecture de la Seine; Émile Levasseur, membre de l'Institut; Toussaint Loua, ancien chef du bureau de la statistique générale de France au ministère du commerce; Marie Georges Hippolyte Martin, docteur en médecine, ancien sénateur; M. Mascart, directeur du bureau central météorologique; Georges Pallain, conseiller d'état, directeur au ministère des finances; Alphonse Pelletier, directeur honoraire de l'administration générale à la préfecture de la Seine; M. Picot, juge de paix du IIIe arrondissement; Georges Renaud, directeur de la "Revue Géographique Internationale"; Jules Adolphe Socquet, docteur en médecine; Jules Worms, médecin honoraire de la préfecture de la Seine; Émile Contant, sous-chef du service de la statistique municipale.

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ing debt can be chargeable to gross mistakes or improprieties. At any rate, the modern Paris is worth to its people every franc that it has cost.

The municipal debt affords the thrifty citizen the most popular form of investment for his savings. The method of issue may be briefly explained. Having decided upon the general policy to be pursued in the construction of public works for a few years to come, the administration obtains authority to borrow a prescribed amount, usually in several yearly instalments. Thus in 1886 it was decided to raise a new loan of 277,000,000 francs, and in 1892 another loan of 200,000,000 was further determined upon. The loan of 1886, it was decided, should consist of about seven hundred thousand shares of 400 francs value each, to be issued from time to time during a period of eleven years.

The great Parisian loans.

The terms and circumstances of each approaching issue are duly advertised, and opportunity is given to every one to subscribe at the mairies of the twenty arrondissements. It invariably happens that the popular subscription for a municipal loan far outruns the amount asked by the authorities. The plan of repayment is that of gradual liquidation or amortizement. A certain number of shares are paid off each year, the particular bonds being selected by lot. A considerable sum of money is divided as prizes, upon a lottery system, among those whose shares are called for liquidation. This premium or prize system, with its element of uncertainty, doubtless adds not a little to the popularity of the municipal loans. The amounts set aside for prizes are of course carefully calculated, and they are to be considered as in effect a portion of the interest charge. Including the premiums, the entire Parisian loan is now outstanding at an average yearly interest of about three

Method of repayment.

Prize premiums.

Average interest rate.

and one half per cent., the more recent issues being at a somewhat lower rate.

Objections to the prize drawings.

As a criticism of the French system of prize drawings it may be urged that,—while municipal loans certainly ought to be subdivided into small shares so that they may be available as an investment for the savings of industrious citizens,—there ought to be no devices connected with the issue which would tend to make the development of public debt unduly popular, thus militating against a severe scrutiny of public expenditures. If municipal bonds were not so popularly sought after as an investment, the authorities of Paris would perhaps be compelled to carry on the public business with a considerably smaller amount of borrowed capital than they are now using.

Outstanding loans.

The great loans (*emprunts*) of Paris upon which payments are still due, and which therefore enter into the outstanding volume of public debt, may well be recapitulated.

The loan of 1855.

The loan authorized by the law of May 2, 1855, consisted of 150,000 shares emitted at 400 francs each and payable at 500 each, the principal of the debt being thus 75,000,000 francs. It was payable in semi-annual instalments, beginning in 1858 and running through forty years. Each outstanding share draws as interest 15 francs a year; and at each semi-annual calling in of shares there are distributed by lot 150,000 francs in fifteen prizes. Thus up to January 1, 1895, there had been canceled 131,595 of the original 150,000 shares, and 65,797,500 francs of the principal had been extinguished, while 56,936,976 francs of interest money and 11,850,000 in prizes had been paid out. On the first day of September, 1897, the last payments will have been made, and thus the loan of 1855 will be wholly extinguished. These details will make clear the modus operandi of all the Parisian loans.

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The next great loan was authorized by the law of August 1, 1860. Its nominal capital was 143,809,000 francs, consisting of 287,618 shares emitted at 475 francs and payable at 500, and of 122,785 shares emitted at 450 and payable at 500. The conditions as to interest, drawings, and premiums were the same as in the preceding loan, except that the whole amount was to be liquidated in 37 years after September 1, 1860. This provides its final extinction upon the very same date (September 1, 1897) as that of the loan of 1855.

Loan of 1860.

Five years later, in July, 1865, a loan of 300,000,000 francs was authorized, to be issued in 600,000 shares at 450 francs each and payable at 500, liquidation to begin in 1869 and to be completed on February 1, 1929. These shares earn 20 francs each per annum as interest, and 1,140,000 francs per annum is the bonus distributed by lot.

Loan of 1865.

The next loan was also one of approximately 300,000,000 francs, and it was authorized in April, 1869. The issue comprised 753,623 shares, sold at 345 francs each but payable at 400, and amortization began in July, 1869, and will extend through a 40-year term to July, 1909. The prizes allotted are fifteen each quarter, or sixty per annum, and they amount to 1,000,000 francs a year, the interest being at the rate of 12 francs a year on each share.

Loan of 1869.

A law of September, 1871, authorized a great loan of about 510,000,000 francs. This was a time when French credit was strained by war; and the 400-franc shares (nearly 1,300,000 in number) were emitted at 270 francs, the interest being 12 francs, and the prize drawings amounting to 1,500,000 a year in 352 different prizes. This loan was to be paid off in 300 quarterly instalments, covering the 75 years from 1872 to 1946.

Loan of 1871.

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The loan authorized in December, 1874, was for the nominal sum of 250,000,000 francs, and was to be amortized in the period from 1875 to 1950. There were issued 500,000 separate obligations of a face value of 500 francs (marketed at 480 francs), drawing an annual interest of 20 francs, and having the usual prize-drawing features.

Loan of 1874.

In 1876, a new loan of 129,000,000 was sanctioned, in 500-franc shares emitted at 465 francs, with annual interest of 20 francs, an amortization period of 73 years, and 500,000 francs each year as prizes.

Loan of 1876.

A law of 1886 authorized a loan of 277,500,000 francs, to be issued in instalments during a period of 11 years, and to be repayable through 75 years after 1897. The shares (nearly seven hundred thousand in number) are of the 400-franc denomination, and have been emitted at prices ranging from 375 to 384 francs. They draw 12 francs yearly interest, and the annual prize money is 1,000,000 francs.

Loan of 1886.

The most recent of the great Paris loans was authorized by a law of July, 1892, the capital amount being 200,000,000. It was to be issued in several instalments and to be repaid in the usual way during a long period, with prize drawings. The popular demand for these shares has been great enough to float a loan twenty times as large.

Loan of 1892.

A debt of about 283,000,000 francs to the Crédit Foncier was, under terms of an arrangement which became effective in 1880, reduced to the form of a loan to be repaid in 117 semi-annual payments of 6,000,000 francs each, this sum covering interest and a portion of the principal. The Crédit Foncier, which may be characterized as a national mortgage or land bank, had made heavy advances to the municipality in furtherance of the Haussmann-Napoleon expenditures; and the debt has now taken the form mentioned above.

Debt to the Crédit Foncier.

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Other annuities outstanding.

From time to time important public works have been constructed for Paris by firms or companies which received their pay in the form of annuities running through a long period. This plan, also, has been pursued in the purchase of the plants of suburban water companies. About 144,000,000 francs of indebtedness has been thus incurred since 1855, about 80,000,000 of which remained outstanding in 1895.

State of the debt in 1895.

Summing up the various issues of interest-bearing obligations, it appears that from 1855 to 1895 the municipality had borrowed, in round figures, 2,400,000,000 francs, of which at the beginning of 1895 there remained outstanding 1,850,000,000. The extinction of the principal has of late proceeded at the rate of about 30,000,000 francs a year, nearly 80,000,000 more being required for interest and prizes.

Annual outlay.

The municipal expenditures for the year 1894 amounted in round figures to somewhat more than three hundred and thirty-six million francs. This sum included nearly fifty million francs raised by loans for what are considered as extraordinary expenses; that is to say, for the cost of various permanent improvements. The ordinary expenses for the year 1894 were 287,000,000 francs. Of this amount a little more than one hundred and nine million francs was required to meet charges upon the public debt. It will be seen that the public debt occasions a yearly outlay amounting to nearly two fifths of the total ordinary expenditure. The several items of administrative outlay occupy almost the same relative position from year to year. The largest is always that of the prefecture of police. As I have already explained, the police administration covers a number of minor services besides the business of the police force proper. The total budget of the police department somewhat exceeds twenty-nine million francs.

Charge upon debt.

Yearly police bill.

It should be remembered that about ten million five hundred thousand francs, or somewhat more than one third the cost of the police administration, is met by a subvention from the national treasury. The public schools and the work of public charity (assistance publique) are next in importance as spending departments, and entail about equal annual charges upon the municipal treasury. Each of these services for the year 1894 required appropriations of approximately twenty-six million francs. They had cost in 1892 a little more than twenty-four million francs each. The recent tendency seems to be an increase for each of these departments of about a million francs a year. The appropriation of 1894 for street services (voie publique), including paving, cleansing, and some other items, reached a total of about twenty-three million seven hundred thousand francs. The same item in 1892 was a little in excess of twenty-one million francs. This did not include the care of the parks and parkways and the item of public illumination, which, taken together, entail a constant yearly charge of approximately twelve million francs.[1]

Bills for schools and for charity.

Cost of street services.

Parks and lighting.

Out of a total ordinary income for 1894 of approximately two hundred and eighty-seven million francs, less than thirty-three million five hundred thousand francs were secured by direct taxation. Nearly one hundred and fifty million five hundred thousand francs were collected from the octroi. In a following chapter I shall give some account of the octroi system in general as prevailing in France. It may suffice, therefore, to remark at this point that the octroi dues are local customs collected upon various

Sources of income.

Octroi system.

[1] For other items of municipal outlay, see the condensed budget for 1894 in tabulated form which appears in the appendix of this volume.

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classes of commodities brought into a city for consumption. The articles usually taxed in this manner are standard necessities of life, including provisions, beverages, and building materials. The statistics of the Paris octroi for a recent year show that 48,000,000 francs were collected upon wines, and more than sixteen millions upon alcoholic and distilled liquors — the total amount under this general schedule of drinks (boissons) exceeding sixty-five million francs. Upon vinegars, oils, essences, and liquids other than beverages, more than seventeen million francs were collected. The amount upon meats was approximately twenty million francs, this general category being swelled to 33,000,000 francs by the inclusion of fish, oysters, butter, cheese, and eggs. Upon articles of fuel, including wood, coal, charcoal, etc., nearly fourteen million francs were collected, while as much more was levied upon lumber and various building materials. Other articles — chiefly bulky substances such as provender for horses — accounted for several million francs in addition to the amounts mentioned, making a total of octroi receipts in excess of one hundred and fifty million francs.

Articles from which octroi dues are collected.

It may be noted that it costs somewhat more than nine million francs to maintain the Parisian octroi administration. The criticism is sometimes urged that the expense of the system is excessive; but 6 per cent. would perhaps be absorbed in the cost of levy, collection, and accounting if an equal sum were to be obtained by some other method. In defense of the octroi it may be remarked that the people of Paris, as of many other continental cities, are accustomed to this indirect mode of contributing to municipal revenues, and a majority of them would probably prefer it to any system of direct taxation.

Cost of octroi administration.

The direct taxes.

Further, let it be borne in mind that the direct taxes levied by the national government itself fall very heavily upon property and upon almost every kind of business. In the succeeding chapter I shall describe the French system of direct taxes, under which the local authorities raise a portion of their revenue by adding a certain rate for municipal purposes to the general rate levied by the national government. If the octroi dues fall largely upon the masses of the people as consumers, it is to be remembered that the municipal revenues are expended for their particular benefit.

In the budget of 1894 the sum of 33,368,300 francs is credited to the municipality's share in the levy of direct taxes,—this amount being collected with the taxes of the national government and paid over to the municipal treasury. Deducting the receipts from the octroi and from direct taxes, there remains 103,000,000 francs of ordinary revenue derived from other sources. The receipts of the water department amount to nearly 16,000,000 francs, and the public revenue from the gas company is almost as large. About 10,500,000 francs comes from the national treasury as a contribution toward the expense of the police department. More than 8,000,000 francs is received as gross income from the public markets; more than 6,000,000 accrues from the sums paid to the city by street railway, omnibus, and cab companies; and from 2,000,000 francs to 4,000,000 francs each is received from (1) the abattoirs, (2) the entrepôts, (3) the cemeteries, (4) the rental of minor street privileges.

Income from productive departments, etc.

It has perhaps been made sufficiently clear, in my account of the various departments of administration, that a constant increase of municipal revenue

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Future financial policy.

from franchises, concessions, and the direct public management of productive enterprises, may reasonably be expected in the future. It would seem both feasible and wise that during the next twenty years the finance authorities of Paris should pursue a conservative policy, husbanding the public resources, developing to the utmost the revenue from monopolies and concessions, and resisting the temptation to add much to the volume of bonded debt. The proposed abolition of the belt of fortifications would be attended by a large outlay for streets, boulevards, and parkways. But it ought to be possible to make the sale of private building-sites yield a fund large enough to pay the entire cost of the execution of a splendid programme of public works in the zone now occupied by the wall, moat, and glacis.

To sum up the financial position of Paris, it must be admitted that the per capita of public debt is large, and the per capita of ordinary annual municipal expenditure also formidable. Over against this burden of expense, however, must be placed the long series of substantial benefits that the municipality confers upon its citizens. In view of the very high average density of the population, the Parisians are peculiarly dependent upon public services of various kinds. The well-paved and well-cleansed streets are essential to comfort and health. Brilliant public illumination, well-shaded streets and boulevards, in fact, all the agencies of civilization that the municipality supplies, are of the highest value to the people. If a large percentage of the wealth of the community is absorbed into the public treasury, that wealth is, upon the whole, disbursed in such a way as to produce results more valuable to society, and in most cases more valuable to the individuals concerned, than could possibly have been secured by private ex-

Large public investments beneficial to the citizens.

Individual prosperity enhanced.

penditure. Public exactions in Paris have not tended to exhaust the sources of private wealth. On the contrary, the municipal government has been conspicuously successful in fostering the industrial and commercial activities of the Parisian people, whose prosperity is shown by their unfailing ability and readiness to invest in municipal and other interest-bearing securities, no less than by the fact of a million individual savings-bank accounts in a population of less than three million souls.

Lessons from Parisian experience.

The experience of Paris, candidly studied, ought to convince the most skeptical that there is no modern community of civilized men which cannot afford to provide, for its areas of dense population, the most perfect public appointments that technical and scientific knowledge have discovered and prescribed. Well-made and clean streets, good water, proper drainage, convenient transit facilities, complete schools, thorough sanitary organization,—these at least should be considered the irreducible minimum. No city should think itself rich enough to prosper without them, and no city is so poor that it cannot afford them if it has any reason whatever for continued existence. But further than this indispensable minimum, any city might hopefully bend its energies toward the acquisition of the finest flowers and fruits of culture and art. Paris has exemplified these propositions with an unfaltering faith in science, in art, and in civilization that deserves our homage.

## CHAPTER II

## THE FRENCH MUNICIPAL SYSTEM.

The legislative reforms of 1789–90.

WITH the great revolution of 1789 there came two sweeping changes in the municipal and local administration of France. One was the establishment of popular self-government, or home-rule. The other was the substitution of a perfectly regular and uniform system for the intricate and anomalous methods under which no two communities could be said to possess identical institutions. Every feature of the old organizations was effaced in order that a fresh beginning might be made upon logical principles. The new administrative scheme created by the acts of the Constituent Assembly in December, 1789, and January, 1790, strongly resembled, in its simplicity and its geometrical sense of relationship and proportion, the lucid and regular rules of local government that the legislators of our trans-Mississippi States found it easy to lay down where the checkerboard lines of the congressional land survey had given territorial uniformity to school-district, township and county.

A uniform system.

The forty thousand old communes.

It is true that nothing quite so radical was attempted in France as a territorial reshaping on geometrical lines of the primary units of administration. The ancient communes, of which there were nearly forty thousand spread like a network over the land, had to be treated as permanent and irreducible

political atoms. There was a sense of distinct identity and of immemorial continuity in these communes,—many of which were cities, towns or villages, while most of them were petty rural parishes or hamlets,—that withstood all shocks of revolution. The best minds of the revolutionary period seem clearly to have recognized the advantages of an autonomous neighborhood life, and to have considered the ancient French commune, with its own domain of lands, highways, and buildings, its local maintenance of order and dispensation of petty justice, its administration of relief and charity, and all its microcosmic life, as the very foundation-stone of a true political structure.

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Permanent political units.

But although the old communes themselves were, as a rule, left without territorial revision, the larger administrative divisions of France were radically altered. There had been thirty-two old-time provinces, in each of which the royal authority had been represented by a functionary known as the *intendant*. He in his turn was represented in subdivisions of the province by officials entitled *subdélégués*. The provincial and local life of France had been subject to the almost unlimited domination of these agents of the central authority, whose hand was at once against the nobility of the regions to which they were assigned, and against the bourgeoisie that composed the old municipal corporations.

The ancient provinces of France.

The lawmakers of 1789 abolished at once the provinces and the intendants. They reparceled France into departments, eighty-nine in number, endeavoring to make the departments as nearly equal in area as circumstances would permit, due account being made of population density, and of the location of chief towns. The departments were subdivided into districts, each district being composed of a very large group of adjacent communes. It was ordained that the affairs

The new departments.

The districts.

CHAP. II.

Governmental structure.

of the department should be managed by (1) a popularly elected Council General, composed of thirty-six members, whose functions were to be deliberative; and (2) a group of eight executive officers, known as the Directory, to be designated by the council general, presumably out of its own membership. The districts were provided with a government on the same plan. Finally, the communes were accorded a simple and uniform method of self-government. At that time the suffrage was not made universal, a small tax qualification excluding the very poorest classes.

Municipal system.

The qualified voters in every commune or municipality, great or small, were authorized to elect a mayor and several other executive officers, these together constituting what was termed a *corps municipal*. A group of men called Notables were further elected for the exercise of deliberative functions. These were twice as many as the executive officers. The notables and the corps municipal, sitting together as one body, formed the council general of the commune or municipality, the mayor and his executive associates being in charge of the active work of administration. The number of officers varied in the ratio of the population of the communes, and it was thus intended by a sliding scale to give the system an automatic adjustment to the large towns on the one hand and the small communes on the other. For communes having less than five hundred people, of which there were a great number in France, it was provided that there should be three members of the corps municipal, that is, the mayor and two executive associates. For more populous localities the membership of the corps municipal was gradually augmented until it reached the maximum number of twenty-one for cities having a population exceeding one hundred thousand. All ordinary municipal government was

Classification of communes by population.

carried on by the corps municipal, which was further divided into an executive bureau and a council.

Organization of a town of one hundred thousand people.

Thus, in a town having a hundred thousand people or more, the voters directly chose a mayor and twenty other members of the municipal corps. Six of the twenty were subsequently designated by the body itself as the mayor's assistants and coadjutors in the regular work of executive administration. The other fourteen were in regular and frequent consultation with the seven, forming a governing council for all the ordinary affairs of the town. At longer intervals the forty-two elected notables were called into session with the twenty-one, making a body of sixty-three men, who formed the council general of the municipality.

Such was the system promptly created by the Constituent Assembly, under the impulse of a grand passion for the principles of simplicity and uniformity in administration, and an equal passion for local autonomy and personal liberty. While it may be criticized on various accounts, nevertheless it was a masterly piece of legislation. It was, perhaps, too far advanced for the actual conditions of French life. However that may be, it was destined to undergo most radical changes and vicissitudes. Doubtless its chief usefulness lay in its embodiment of high ideals. It has taken a hundred years for the French people, through various political and administrative experiences, to acquire that practical habit of local self-government which the municipal laws of 1790 took for granted.

Ideal rather than practical.

The system too elaborate for small towns.

One of the most serious faults of this legislation was its failure to discriminate wisely between urban and rural units of local government. Except that the number of officers was smaller in the communes of sparse population, the exact scheme of organization that was provided for cities and large towns was also

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made applicable to all local units down to the population line of five hundred. The communes of less than five hundred people were of simpler organization. But there were thousands of local-government units in France possessing a population of more than five hundred and less than five thousand, for which the law of 1789–90 provided a cumbrous and over-elaborate system of administration. The French laws from that time until now have never made quite enough difference between the government of urban and rural communities, although the distinctions have become better marked.

Permanent results of the legislation of 1790.

From that period of lawmaking there has survived the series of departments, which have become crystallized into entities as distinct and real as the great English counties, while very much more uniform in size and population. Moreover, throughout the entire administrative system of France, there has remained, despite all changes of method and of spirit, an unwavering devotion to the principle of system and uniformity. I have said that the laws of the Constituent Assembly exemplified the two great ideas, first, of simplicity and uniformity in the structure of municipal and local government; and second, of popular home rule on the elective basis. It is this principle of decentralization and local self-responsibility

The hard lesson of local self-government.

that has been the hard lesson for the French nation to master. They have not perfectly learned it yet, although the experience of a hundred years has begun to give them confidence in the principle, and a considerable measure of ability in applying it.

In 1795, France having come under the government of the Directory, a new administrative system was devised which possessed some merits and many defects. This new legislation is always cited as the *Constitution du 5 Fructidor, de l'an III.* (August 22,

1795). In the departments the elective councils were abolished, and all functions, both of deliberation and of action, were merged in a departmental Directory of five members. These directors were elected one each year for five-year terms by all the qualified voters of the department. The central Directory of the Republic, meanwhile, retained the right to depose the departmental directors and to appoint substitutes. Under the system of 1790, besides the officers whom I have already mentioned, the people of the department were empowered to elect a so-called *Syndic Procureur*, who had a voice but not a vote in the departmental council, and who was the department's agent and representative in various legal and other relationships. This popularly elected officer was now replaced in the Directory's system by a so-called *Commissaire*, who was appointed by the national government from among the citizens domiciled in the department, and whose business it was to oversee the execution of the national laws within his territory. Thus, while the government of the department still remained largely local and representative, it will be readily seen that the strong tendency of the system of 1795 was toward centralization.

The Directory's new system, 1795.

Tendency toward centralization.

In place of the districts which the laws of 1789 had created as intermediary between the departments and the communes, and which had possessed only a limited importance, the Directory now substituted a much smaller series of territorial divisions entitled *cantons*. The cantons were given an incomparably greater importance than the districts which they replaced. The canton comprised an average of about twelve communes, while the district included perhaps a hundred. The function of the canton in the rural regions may readily be explained. It was intended to remedy the serious mistake in the earlier laws of attempting to

Creation of the "cantons."

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Their place and function in rural life.

impose an elaborate municipal government upon simple agricultural neighborhoods. The full municipal organization was now abolished in communes of less than five thousand inhabitants. Each commune of less than this number of people was authorized to elect from among its own citizens a municipal agent and one adjunct or assistant. All active administration in the commune was confided to these two officials. But it was the canton, under this régime, which became the real unit of government. There was established what was known as an *administration municipal du canton*, which was composed of the agents of the several communes constituting the cantonal circumscription, together with a President elected by direct vote of the qualified electors of the canton. All deliberative functions were intrusted to this body.

The commune had therefore lost much of its independence, and had in effect become hardly anything more than an administrative division of the canton. Something very similar has taken place in several of our American States, where the county government has gained authority at the expense of the township government. Thus the cantonal administration of 1795 might be considered as reproduced in a western county where each township elected a supervisor or trustee for the administration of its ordinary affairs, and where these township supervisors, coming together in session at the county-seat, constituted a board of supervisors for the county, under the chairmanship of a president of the board elected directly by all the voters of the county.

An American parallel.

This system was not wholly bad for the rural parts of France. But the Directory, with the French passion for logic and symmetry, undertook to assimilate the large towns to the cantonal unit. Each commune or municipality having from five thousand to one hun-

The urban cantons.

dred thousand people was made a distinct cantonal entity, with an administration of its own composed of from five to nine members, according to the size of the town or city. These officials were elected by the voters of the town, and constituted what might be called a board of municipal trustees or directors, in whose hands was reposed the exercise of all municipal functions, whether deliberative or executive. The system was by no means an absurd one; and in view of the actual conditions of local life prevailing in France at that time, it may have been better than the system of 1789.

Subdividing large towns.

When the large towns having more than a hundred thousand people had to be dealt with, it was determined to try the plan of subdividing them into cantons, each of which should have its own board of directors. Thus, Paris was partitioned into twelve *municipalités cantonales*, while Marseilles and Lyons — the only other towns which at that time possessed more than a hundred thousand inhabitants — were each cut into three such administrative districts. The voters in each of these urban cantons elected a directory of seven members, charged with all the duties of current administration. In order, however, to provide for certain administrative municipal tasks which could not be apportioned to these arbitrary divisions, some sort of central bureau was requisite; and the Directory of the Republic retained in its own hands the designation of the members of the central bureau for Paris, while for the other two large towns the three members of the central municipal bureau were designated by the departmental directory, subject to confirmation by the national government.

Cantonal directories and central bureaus.

It should be noted that these cantonal administrations were subordinated in the exercise of their authority to the departmental administrations. Thus,

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Subjection of cantons to departments.

the government of the department had a right to nullify the acts of the cantons and municipalities, and also under certain circumstances to suspend the cantonal and municipal officers. But such suspension was in turn subject to the approval or disapproval of the central government at Paris. This possibility of interference by the higher authorities constituted a serious limitation upon the régime of local independence which had been ordained five years earlier.

Summary estimate of the system.

Let this suffice for a rapid outlining of the administrative system of 1795. One is at a loss to describe it in such a manner as to make it seem an actual arrangement and to relieve it from the appearance of being altogether artificial and forced. It certainly was surcharged with the experimenting audacity of the times which gave it birth. Nevertheless it evinces some true elements of constructive statesmanship. Chiefly, however, it serves to betray the exigencies of a situation in the sphere of the higher politics which compelled the transient possessors of power to tighten their grasp and to strengthen the lines of central authority.

Napoleon's system of 1800.

It remained for the legislation of the year 1800, inspired by Napoleon as *Premier Consul*, to complete the work of centralization. The principle of unity and symmetry was retained in all perfection, but the principle of local self-government was absolutely rejected. The departmental commissaire, who had been selected by the Directory from among the citizens of the department, and who had been charged with the duty of seeing that the public laws were enforced, was transmuted by Napoleon into the Prefect of the department. The prefect was not only charged with seeing that the laws were enforced, but he was made the sole executive and administrative authority in the department. He was appointed for each department

Entrance of the prefect.

by the central authority, that is to say, by Napoleon himself. The departmental Council General was retained as a matter of form, but its elective character had disappeared. It was now a mere body of appointed advisers, varying in number from sixteen to twenty-four, all of whom were designated by the Premier Consul himself, acting of course very largely upon the suggestions of his trusted prefect. There was also appointed by the central authority a so-called Council of Prefecture, consisting of from three to five members, its business being to deal judicially with administrative disputes and contentions arising in the government of the department or of any of its minor divisions.

Councils become appointive.

The prefect was, in point of fact, the virtual resurrection of the intendant of the ancien régime. He was the personal agent of the central authority, was a stranger in the department which he administered, and belonged to the type of nomadic administrative functionary whose prototype is found in the Roman proconsul, and whose race has perhaps never been extinct in France from the time of the conquest of Gaul to the present day. Descending one step from the department and its prefectoral administration, we find the old district, practically as created in 1789, now reconstituted under the name of the arrondissement. This division, as I have explained, had been abandoned by the law of 1795 in favor of the much smaller division called the canton. As an administrative division the canton now practically disappeared, although retained as a judicial district and for certain other purposes. In the arrondissement there made appearance the sub-prefect, who is altogether analogous to the sub-delegate of the ancien régime, just as the prefect of the department suggests the old-time intendant of the province. The Napoleonic sub-prefect was the

Historical character of the prefect.

Appearance of the arrondissement.

And the sub-prefect.

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appointee of the higher authorities, was the agent of the prefect, and had the assistance of an arrondissement council of ten or twelve members whose functions were advisory, and who held their positions by virtue of appointment by the central authority. The arrondissement was not a complete and distinct legal personality like the department on the one hand or the municipality or commune on the other, but a mere division for administrative convenience, existing for comparatively limited purposes, holding no property in its own name or right, and having none of the attributes of a body politic and corporate.

The limited nature of the arrondissements.

As for the communes under the legislation of the year 1800 (which is always cited as the law of 28 Pluviôse, an VIII.), we find that they were still accorded, as in the law of 1789, a mayor with several adjuncts or assistant executive officers and deliberative councils. But whereas these were all elected by the people of the commune under the earlier legislation, they had all, by the fundamental law of the year 1800, become appointive functionaries, owing their places to the central executive authority. Of course Napoleon could not in his own person make selection of mayors, executive adjuncts, municipal councilors, arrondissement councilors, and departmental councilors, for the whole of France, inasmuch as this would have involved the naming of half a million functionaries. But where he did not make personal selections, the choice was exercised for him by his prefects or sub-prefects.

All municipal officers appointed.

Extent of the Premier Consul's patronage.

In practice, the Premier Consul was supposed to appoint the mayors and councils of cities and towns having more than five thousand people; while the departmental prefects were authorized to make appointments in the smaller communes. The only limitation upon this exercise of absolute central power was the

requirement that mayors and municipal councilors must be chosen from certain lists of their fellow-citizens which the electors had some voice in preparing. This limitation in practice did not act as an important restraint. Two or three years later, under some circumstances, it was permitted to the electors of municipalities to nominate two candidates for every place which became vacant, one of whom should be appointed by the superior authority; but even this concession was not allowed to become operative as an ordinary rule.

Some slight limitations.

This arbitrary system of municipal subjection was not abandoned, as it ought to have been, upon the downfall of Napoleon's empire. It held its own without material modification at any point under the period of the Restoration up to the revolution of 1830, when France again became a republic except in name, — Louis Philippe's being "a throne surrounded by republican institutions." There had been able statesmen in the epoch of the Restoration who had demanded a return to the plan of popularly elected municipal councils, but in vain. This reform was promptly granted by the government of 1830.

Napoleonic system continued under Restoration.

The act of March, 1831, allowed a list of municipal voters possessing a modest property qualification to choose the members of the municipal council. The central government retained the right to appoint the mayors and their adjuncts or executive assistants; but in making these appointments the minister of the interior was obliged to confine his selections wholly to the elected members of the council. Herein lay a very substantial concession to the principle of local self-government. The councils remained, however, very much under the tutelage of the prefect, who continued to administer the department as the direct representative of the central authorities.

Municipal councils become elective in 1831.

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Through all these vicissitudes, it should be observed, municipal affairs were actively administered by mayors and adjuncts, with the assistance in deliberative affairs of a municipal council. The principal changes from time to time concerned themselves almost wholly with the question whether these local officers should derive their places and authority primarily from the commune itself or from the higher government. The revolution of 1848 carried the emancipation of municipalities much further than that of 1830. Universal suffrage now replaced the limited suffrage which had held sway for nearly twenty years; while for towns of six thousand people or less the municipal councils were permitted to select the mayor and other executive officers from their own membership, without interference from any superior administration. As for the towns of greater population, the central government of the Republic thought it necessary to retain the right to designate the executive officers, although appointments were always made from among the elected members of the municipal councils. The spirit of the legislation of 1848 was that of confidence in the principle of municipal home-rule.

All fluctuations affected the question of local autonomy.

Progressive laws of 1848.

With the public events which in 1852 made Louis Napoleon Emperor of the French, there began another epoch in the administrative life of the French municipalities. The prefectoral system was reinvigorated, and the mayors and executive officers of all municipalities and communes became, like the sub-prefects, a part of the administrative mechanism of a system of autocratic, centralized government. The municipal councils retained their elective character, but the mayors and adjuncts of all communes, from the great towns to the smallest country hamlet, were named by the Emperor or by the prefects acting for him, and the choice was not limited to the membership of the councils.

Centralized régime of Napoleon III.

The municipal system retained these essential characteristics throughout the period of the Second Empire. I have shown in the preceding chapter with what scope and magnificence the work of modernizing the capital city was prosecuted during this epoch; and it is true of other French cities and towns that the spirit of the new Paris was to some extent reflected in their municipal activities. For Baron Haussmann, as prefect of the Seine, was only one of Napoleon III.'s energetic agents. It must be remembered that through this period the initiative in local and municipal life belonged chiefly to the appointed executive officers. The elected councils were expected to approve the projects recommended by the executive authority, and to duly sanction by their votes the financial estimates and budgets that were submitted for their formal acceptance. The councils, it is true, possessed some measure of substantial influence and authority; but the imperial will, which made itself felt so directly and powerfully in the affairs of Paris, was not without its high degree of potency also in Lyons, Marseilles, and every other considerable town of France. Inasmuch as this influence was, in the main, exerted in behalf of municipal progress, as I have endeavored to make clear in my description of the Napoleon-Haussmann epoch in the transformation of Paris, it cannot be said that the Second Empire forms a barren or reactionary period in the material and visible progress of the chief communities of France. But it was certainly a period in which the principle of self-government was repressed and discouraged; and its educative effect upon the citizenship of the nation cannot be considered beneficial.

Character of the period.

Influence of Napoleon III.

There are several reasons why the legislation of 1871, immediately following the overthrow of the Empire and ushering in the happier and better epoch of

The Third Republic.

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the Third Republic, did not revert with confidence to the salutary principles of the municipal legislation of the two preceding republican periods. The immediate reason undoubtedly was the position of M. Thiers. This eminent statesman felt himself responsible for the political situation of the nation as a whole, at a time when the communal uprising in Paris had caused many conservative men to doubt the advantages of municipal autonomy, while also it was declared that a large concession of local self-government would aid the schemes, in various parts of France, of the monarchist factions, which were formidably plotting against the republic.

Conservatism of President Thiers.

In short, it was a moment of peculiar political strain and exigency; and it is not to be wondered at that President Thiers, who had grown old in the traditions of the system of high centralization, should have lacked the courage to try the experiment of allowing the people of the French towns to manage their own affairs in their own way. The National Assembly at first voted to allow all municipal councils to choose the mayors and executive adjuncts. Then M. Thiers protested and threatened to resign unless the vote were rescinded; and his wishes were obeyed. Accordingly, the higher authorities retained the right to appoint the mayors of towns having twenty thousand people or more, while for the smaller places the councils were allowed to designate the mayor and adjuncts.

A compromise adopted.

Municipal councils had been appointed for seven-year terms under the Second Empire, and the mayors for terms of five years. The National Assembly of 1871 reduced the terms of councilors and mayors alike to three years. Several concessions of some incidental importance to the principle of local self-government were adopted, and it is certainly important

Terms of municipal officers.

to bear in mind the spirit of the National Assembly, which was distinctly friendly to the idea of decentralization, radical changes in the system of local government being regarded as merely postponed because some of the leading spirits in national affairs did not deem it safe for the moment to relinquish the republic's firm central hold on local administration so long as there was menace from foreign complications without or from royalist factions within.

Spirit of the National Assembly.

The experience of immediately following years abundantly proved this conservative timidity to have been ill founded. Central domination in purely local affairs is incompatible with a republican form of government. Under the autocratic system of Napoleon III., there was the substance of power as well as the form in the system of centralization. But when the Third Republic was fairly launched upon its course, the spirit of self-government grew constantly stronger in the towns and cities; and the central authorities of the republic, obliged to rely upon the support of public opinion rather than upon military power, did not find it politic very often to thwart the will of a community by appointing an unpopular mayor. As a natural consequence, in those early years of the republic, the municipal councils (elected almost universally upon the lines of national party or faction), boldly proceeded to designate their own mayors and adjuncts, and the higher authorities tamely ratified the local choice. In some cases the councils went so far as to install their mayors without waiting for the ratification of the President of the republic.

Centralization impracticable under a republic.

Municipal self-assertion.

Under the Napoleonic system the municipal governments were obliged to submit every act of any importance to the prefectoral or national authorities for their assent. Mayors and councils were subject

Napoleonic domination of local government.

CHAP. II. to suspension at any time by the prefect, and to dissolution by order of the central government at Paris. All this exercise of tutelage was, moreover, an active and constant domination, rather than a formal and passive acquiescence or an occasional check. But while under the republic there still survived in law this subjection of municipal budgets, ordinances, contracts, and all other matters deliberative or executive, to the central government or its prefectoral agents, a different spirit became manifest. The municipal councils and their executive officers grew more assertive, while the prefects and the central government became correspondingly more compliant. The principle of self-government was no longer set at defiance; and the supervision of municipal officers by the superior officials tended more and more to limit itself to a reasonable protection of the municipalities themselves against bad financiering, or against some wayward or exceptional act of policy.

Different spirit under the republic.

Although the republican lawmakers of 1871 abstained from any radical revision of the system of municipal government prevailing throughout France, they allowed themselves at least to deal broadly and wisely with the administrative system of the departments. The loss of Alsace and Lorraine had reduced the eighty-nine departments to eighty-seven. All existing laws affecting the departments in any wise were thoroughly revised and recast, so that there emerged one elaborate and well-codified act. The popularly elected Council General of the department was accorded a much increased measure of authority, and it was permitted to designate out of its own membership a standing executive commission which should be on constant duty, and should take in hand some of the most important functions that had previously devolved upon the appointed prefect. This depart-

Departmental reform.

Legislation of 1871.

mental legislation formed a large step in the direction of true constitutional reform, and its wisdom has been justified by the experience of more than a quarter of a century.

Experience as a guide.

It was perhaps quite as well that the Assembly of 1871 should have paused where it did. All that was needed was a few years of the practical working of the new departmental laws, and some experience of the futility of attempting to hold municipal administration under the close tutelage of a central republican government, in order to make it easy enough, in the fullness of time, to agree upon a reform of the municipal and communal system.

Great municipal code of 1884.

The present municipal system of France was framed in the act which bears the date of April 5, 1884. The laws that prescribed the system then found surviving were scattered through the statute-books of ninety-five years; for there still remained in force some sections of the acts of 1789 and 1790, while parts of the enactments and decrees of every subsequent period had been kept alive. In 1884, however, every vestige of earlier legislation was repealed in order that one complete statute might serve as a municipal code, embodying every necessary legal provision for the organization and government of the communes.

Compared with English code.

This piece of legislation is analogous to the English municipal code of 1882, which consolidated the numerous enactments of the period following the great municipal reform bill of 1835, and which has given the British municipal corporations so admirable a framework. Several distinguished French publicists — among them M. Paul Leroy-Beaulieu — had long held up the English municipal system as the one great and admirable model toward the principles of which they urged their fellow-countrymen to advance in reforming the French system. Unquestionably the health-

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ful and prosperous municipal life of the British towns under the popular self-government guaranteed to them by the reform legislation of a half-century previous, and further confirmed by the code of 1882, had its due influence upon the minds of the French statesmen who devised the excellent statute of April, 1884.

The English system, as I have elsewhere shown, concerns itself only with those urban entities which have secured recognition under the law as municipal corporations. It has been reserved for the legislation of 1894, in the Local Government Bill, to provide the civil parishes — that is to say, the fifteen thousand minor administrative areas of England and Wales — with a system of local self-government, under elective councils, analogous to that which the municipal corporations have so long enjoyed. Under the French system each unit of local administration, whether great or small, is known as a commune, and each has its so-called municipal organization. The one statute of 1884 deals with them all, adapting itself to their differences of size by classifying them according to population. The British Local Government Act of 1888, which established county councils on the elective plan, and completely reconstructed the government of these larger divisions of the country, may be regarded as comparable with the French legislation of 1871, which reformed the administrative system of the departments. Thus, the English began their local ministrative reforms with the principal towns, adopting for them, by the municipal act of 1835, a uniform system on the basis of popular self-government. In 1888 they applied an analogous system to the government of the counties, and in 1894 they erected a system of parish government upon the same principles. Viewing the French system as it now stands, the departmental reform dates from 1871,

English act of 1894.

French code of 1884 corresponds to English acts of 1882 and 1894.

English counties and French departments.

thus preceding the reform of the English counties by seventeen years; while the thousands of country districts or communes, analogous to the English parishes, were all comprised in the municipal legislation of 1884. Throughout the French system there is the unity and harmony of an elaborate piece of architecture made fit for its purpose by skilful and artistic hands. The English system, on the other hand, seems more to resemble a sturdy tree with firm, deep roots and massive trunk, and with spreading boughs which maintain a general symmetry and balance without semblance of precise regularity.

The two systems contrasted.

The sacrifice of territory as a result of the war with Germany cost France nearly 2000 communes; but there remained approximately 36,000, which number in 1895 had increased to 36,140, through rearrangements of boundary resulting from growth and change.[1] The law of 1884 contains 168 articles, the first of which is as follows: "The municipal corps of each commune shall be composed of the municipal council, the mayor, and one or more adjuncts." Former legislation had designated the mayor and his executive assistants first, and the municipal council afterward. It was by intention, and not by accident, that the order was reversed in the new law. The Minister of the Interior, in a circular addressed to the prefects of all the departments, dated May 15, 1884,— his letter being an elaborate running commentary upon the provisions of the new municipal act,— remarked that this first article was a "reproduction of the opening paragraph of the law of May 5, 1855, with this exception: that in the enumeration of the members of the municipal corps, the first place is now assigned

Present government of the communes.

Municipal council as chief fact.

[1] It may be well to observe at this point that the 87 departments of France are (in 1895) subdivided into 362 arrondissements, 2871 cantons, and 36,140 communes.

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to the municipal council. It is necessary," he continued, "to recognize the fact that by this change homage is meant to be paid to the direct representatives of universal suffrage, from whom the mayor himself derives his powers."

Membership of council varies with population.

For communes having 500 inhabitants or less the municipal council consists of ten members. There are more than seventeen thousand,—nearly one half of the total number of French communes,—belonging to this class. More than fourteen thousand have between 500 and 1500 people, and for each of these the number of councilors is twelve. The next class embraces communes of less than 2500 people, to which sixteen councilors are allowed. Twenty-one members belong to the councils of towns having from 2500 to 3500 people, and twenty-three councilors to those having more than 3500 and less than 10,000. Twenty-seven councilors are chosen by communes having from 10,000 to 30,000; thirty by those having from 30,000 to 40,000; thirty-two by those having from 40,000 to 50,000; thirty-four by those having from 50,000 to 60,000; and thirty-six belong to those with a population exceeding 60,000, excepting Lyons and Paris. By a special arrangement the council of Lyons contains fifty-four members, and that of Paris eighty.

Election on general ticket.

As a general rule, the act ordains that "the election of the members of the municipal council shall take place for every commune *au scrutin de liste*"—that is to say, by general ticket. It is further provided, however, that communes of more than ten thousand people may be divided into *sections électorales*, each of which may choose a certain number of councilors. But these sections or wards may not be very small, for each one of them must have at least four councilors to elect. Paris, as the preceding chapter has ex-

plained, is altogether exceptional. Lyons is also an exception, it is divided by law into six permanent arrondissements, to which are distributed the fifty-four members of the council, each arrondissement electing its group of councilors on a single ticket. As for Bordeaux, Marseilles, or any other large town, the number of sections électorales cannot exceed nine. It is not necessary that these ward lines should be frequently changed in order to secure equality, inasmuch as the law provides that the whole number of councilors shall be apportioned to the sections in the ratio of the number of voters enrolled on the lists. The division into sections is not required, however, and there are towns of considerable size which have preferred to adhere to the general rule of the law — that is to say, to elect the entire body of councilors upon one general ticket. The twenty-three councilors allotted to communes having populations between 3500 and 10,000 must in all cases be chosen upon a general ticket, unless it should happen that the commune takes the form of a large country township with two or more entirely distinct villages, in which case each village is assigned its due quota of councilors. Such instances, of course, are not very frequent.

Division of large towns into sections.

General ticket for sections.

The division of a large town into electoral sections is considered a matter of serious importance, and it can only be accomplished in accordance with a careful and deliberate procedure in which the higher authorities as well as the municipal council must participate. The object of the law is to make sure that there is real justification for the creation of ward lines or for their rearrangement, and to prevent any capricious change for gerrymandering purposes. Thus the presumption is in favor of a considerable stability. In every case the four or more councilorships assigned

Precautions against gerrymandering.

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to a section must be filled on the general-ticket plan — that is to say, each voter is allowed to cast his ballot for as many names as the section in which he votes has council seats to fill. This division into sections is not a matter identical with the arrangement of mere voting precincts. The number of polling-places is a question of minor convenience, and one easily adjusted from time to time.

The four-year term.

The law of 1884 increased the term of the municipal councilors to four years. The law of 1871 had reduced it to three.[1] Some of the lawmakers of 1884 were in favor of the principle of partial renewal. They favored the four-year term with biennial elections, half of the membership of the council retiring every second year. A renewal of the entire body, however, once every four years, seemed to the majority to be in more natural accord with the genius of the French system. It is possibly true that it was better adapted to French conditions, and better calculated to develop the habit of democratic home rule in the French communities. There is much to be said on both sides, although partial renewal certainly promotes continuity in the management of municipal enterprises, and aids in the execution of large public works.

Question of partial renewal.

Municipal elections.

The municipal elections occur simultaneously throughout France on the first Sunday in May every fourth year. The propriety of a separation of municipal from other elections has apparently never been

[1] There has been much variation on this point in French practice. Thus, in 1831 the term of councilors was fixed at six years, and half the body was renewed every three years. The law of 1855 prescribed a five-year term, the whole body retiring together. In 1867 the term was lengthened to seven years, and in 1870 it was reduced again to five years. In 1871 it was further reduced to three, and in 1884 it was increased to four, where it has since remained.

questioned in France. The municipal electorate was also formerly distinct. The third republic had ordained universal suffrage in national elections for all male citizens who had attained the age of twenty-one years and had lived six months in the commune where they were enrolled. But for the municipal suffrage some tax-paying qualifications were requisite, together with a longer period of residence. The law of 1884, however, removed all distinctions and unified the voting-lists. Consequently the municipal suffrage may now be exercised by every Frenchman who has attained his majority, has lived six months in the commune, and has not lost his civil rights and privileges through the commission of a crime or any other disqualifying act. Thus, universal suffrage in France means almost precisely what the same term signifies in the United States.

Universal suffrage since 1884.

There is one important difference to be noted, however, between the electoral roll of a large French town and the registration list of a corresponding American municipality. The French system of taxation includes not only several kinds of property taxes, but also a classified tax upon business pursuits; and every one who owns property or carries on any kind of business or calling in a town is entered upon the tax-rolls. The electoral laws permit any man thus entered on the tax-rolls of a commune to exercise his voting privileges in that place. Thus, suburban residents who live beyond the municipal confines may vote in the town provided they do business or pay taxes there. Such men are also eligible for election to the council under certain limitations. This provision does not in fact add a very large contingent to the municipal voting-list, but it is a reasonable arrangement, and a convenient one. An analogous arrangement exists in England, except that the

A provision for non-resident voters.

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Suburbans may choose their voting place.

English property-owner may vote in both places. The French voter may under no circumstances vote in more than one place; and if he chooses to enroll himself in the urban commune where he spends his business hours, he may not exercise the suffrage in the rural commune where he makes his domicile.

Conduct of an election.

In the small communes, which need only one polling-place, the mayor presides at the election. Where there are several polling-places the task of presiding officer devolves upon the mayor's adjuncts, and then upon the members of the municipal council, in the regular and prescribed order of their names as entered upon an official list. Additional appointments, if necessary, are made by the mayor. Associated with the presiding officer as election judges (*assesseurs*) are the two oldest voters and the two youngest ones who are present in the polling-room at the time when the polls are opened. These five designate the secretary or clerk of the electoral bureau, who has a voice but not a vote in the actions of the board. The voting system is a well-devised and orderly one, although France has not yet adopted the official ballot which we in America call the Australian system. The voter prepares his ticket before entering the voting-room, and hands the folded paper, which must be white and without external mark or sign, to the president of the bureau, who deposits it in the ballot box. The name of each voter is checked upon the certified list of registered voters which is in the hands of the election judges.

Voting system.

The second ballot.

It is commonly expected in a French municipal election that a supplementary ballot on the following Sunday will be necessary. This is because the law provides that no candidate may be declared elected on the first ballot unless he has obtained an absolute majority of all the votes cast; and, further, unless the

number of votes cast for him has been equal to one fourth of the entire number of voters enrolled as belonging to the commune or section. Under certain circumstances, as when the voting strength is principally divided between two tickets, the first ballot may be conclusive for every seat in the municipal council. But when, as very frequently occurs, there are several tickets in the field, together with much scratching and substitution, the supplementary ballot will usually be necessary. On the second ballot those candidates who have the largest number of votes are declared elected, whether or not they have an absolute majority.

Majority requisite on first ballot, but not on second.

Thus, to illustrate concretely, let us say that B—, which is a town of ten thousand people, with approximately two thousand registered voters, is holding its municipal election. Twenty-three councilors are to be chosen upon general ticket. Each elector votes for a full list of twenty-three. It may well happen that a hundred different individuals are voted for. No one can be elected on the first ballot unless he secures more than half of all the votes actually cast, and, further, unless this half be more than five hundred,— that is to say, more than one quarter of the total electorate. Let us suppose that ten candidates receive the requisite majority. They are declared elected, and the mayor duly announces the opening of the polls on the following Sunday for the election of the remaining thirteen. At the second polling each voter is entitled to deposit a ballot containing thirteen names; and the thirteen who stand highest when the votes are counted are entitled to seats in the council. In the large towns where a division into sections has been made, and where each section has perhaps only four or five councilors to elect, the method is not different, although the short list is

A concrete instance.

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obviously somewhat easier to manage than a long one. It will be seen that the French system makes no provision for the cumulation of votes, or for any plan of proportional or minority representation. French experience in government by popular elections was perhaps not considered mature enough to justify experiments and innovations which England, Switzerland, or even the United States might test with safety and advantage.

No provision for minority representation.

Members of the council must be twenty-five years old. In other respects they have the same qualifications as the voters. It is, however, provided that not more than one fourth of the members of the council can be elected from among those voters who do not have their actual domicile within the boundaries of the commune. This limitation is scarcely necessary, inasmuch as the natural tendency in France, as everywhere else, is in favor of candidates who reside in the same area with the voting constituency. A resident of one section of a French city is entirely eligible as a candidate for election in any other section, but his chances of success, generally speaking, would be weakened outside of his own district. The French statesmen have recognized the fact that the *scrutin de liste*, or general ticket, tends to secure a higher average degree of character and ability in municipal councils and other representative bodies than the plan of one-name districts. They have, therefore, done well to retain that principle; and their rejection of it in the election of the members of the Paris council is a conspicuous exception which experience condemns.

Qualifications for council.

Value of "scrutin de liste."

Having elected their municipal councilors, the voters have performed their one chief task. They have conferred upon a chosen group of their fellow-citizens the right to exercise all the powers which are by law reposed in the municipal organism. The

Choosing the mayors and adjuncts.

council proceeds without delay to choose from its own membership the mayor and his so-called adjuncts or assistants. These are all appointed for the full term of four years. The council elects them by ballot. On the first and second votes an absolute majority is requisite. If such a majority has been lacking, a third ballot will suffice, the candidate who then has a plurality of votes being declared elected. In the case of a "tie," the office is accorded to the oldest of the candidates who have received an equal number of votes.

Number of adjuncts.

The number of adjuncts varies in accordance with the size of the commune. Those having less than twenty-five hundred inhabitants elect only one adjunct, while those whose population is between twenty-five hundred and ten thousand elect two. One more is then added for each twenty-five thousand additional population, with the proviso that the maximum number shall not exceed twelve. An exception is made in the case of Lyons, the council of which is authorized to designate seventeen adjuncts. Apart from Paris and Lyons, all the large towns and cities of France, therefore, have municipal councils of thirty-six members, which are not merely permitted but required to appoint from their own number a mayor and the prescribed number of adjuncts or executive assistants.

Relation of mayor to council.

The mayor is the presiding officer of the council and the executive head of the municipality. His range of duties is wide and responsible. He assigns various administrative tasks to his adjuncts. Without attempting to enter too minutely into details, it may readily be seen that the mayor and his adjuncts constitute in effect a standing executive committee of the council, responsible for the every-day administration of municipal affairs. Under the French system the full council does not of necessity hold very fre-

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quent sittings. Four sessions each year are prescribed by law. Three of these so-called ordinary sessions may last for fifteen days each, while the fourth — in which the annual budget is discussed, and the general official policy of the municipality is debated for the following year — is permitted to remain in session for six weeks. Meantime, there may be as many so-called extraordinary sessions as the mayor wishes to call. On the other hand, the council itself has due initiative, and a majority may at any time appoint a meeting, which the mayor is obliged to convoke in regular form.

Frequency of sessions.

It may fairly be claimed that the French law gives itself needless concern in its attempt to prescribe the dates and duration of the ordinary sessions of municipal councils. The matter is one which of necessity tends to regulate itself according to the views of particular localities. Thus it may readily be seen that in one commune the four formal sessions might almost entirely suffice, while some other municipality might prefer to hold an extraordinary meeting twice a month, or even once a week, and thus to avoid very protracted sessions when the quarterly dates prescribed by law have come around. The executive group, composed of the mayor and his adjuncts, is expected to meet with considerable frequency at the call of the mayor.

The law needlessly exacting.

The council itself also appoints a number of standing committees for the consideration of important subjects, or the general oversight of particular departments. All these committees have the mayor as nominal chairman, although the actual duties of the chairmanship are usually performed by one of the adjuncts, who is assigned to act in the mayor's stead. This adjunct would naturally be the one charged by the mayor with the active executive oversight of the

Committees of the council.

department in which the committee is interested. The standing committees of a French municipal council are of very much less importance than those of an English council. In England the council itself, working through its standing committees, is an administrative as well as a deliberative and financial body. But in France the council assigns all administrative and executive duties to the mayor and his adjuncts. Thus a standing committee in a French council consults, advises, and keeps itself informed, and it may exercise a considerable influence over the action of the mayor and adjuncts; but it does not act of itself.

Compared with English committees.

In England the council, on the recommendation of the standing committees, makes all appointments of municipal officers and employees, while in France the mayor exercises the entire appointing power except as regards certain offices which the law specifically requires to be filled in some other way. The British mayor is merely the presiding officer of the council, holding his place for only one year and possessing no administrative authority or power of appointment. In the French, as in some American municipalities, the mayor is the executive head with powers and duties which would seem to give him almost the position of a dictator. The sharp distinction, however, between the French and American systems lies in the fact that the French mayor is not only a member of the council and the council's presiding officer, but that he and his adjuncts owe their appointments entirely to their fellow-councilors.

Mayor has full appointing power.

Compared with American system.

Thus in fact the English and French systems both have perfect unity, and the municipal council is the central and important fact in both. If I am not mistaken in the tendency of things, as the system actually works in France the real influence of the council is increasing at the expense of that of the mayor. It

Growth of the council's influence.

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could not well be otherwise, where the council is composed of active and intelligent men. The standing committees must inevitably grow in influence, and the adjuncts in the course of time must, it would seem to me, find themselves in very much the same position as the chairmen of the chief committees of an English council. The mayor, under the French system, will doubtless long continue to be intrusted with the general oversight and control of the executive work of the commune; but I am not disposed to believe that he will always hold so dominant a place as the law of 1884 seems to contemplate. Experience will soon begin to show how far the French councils, without any changes in the law, will be able to make the mayor practically their obedient servant in the performance of his executive functions.

Tendency to dominate the mayor.

Councilors, mayors, and adjuncts are all required to serve without salary. Allowances may be voted to cover actual expenses incurred in connection with the performance of official duty; but such outlays are as a rule rather strictly construed,— although, as I have shown in the preceding chapter, the Paris council has not been altogether self-denying.

No salaries.

Every mayor in France, while filling primarily the position of chief of the local administration, is also regarded as a representative, for certain specified purposes, of the higher authority. The law very distinctly ascribes to him this double character. It recites that he is charged — under the control of the municipal council and the surveillance of the higher authorities — with the care and management of the communal property; with the oversight of the municipal revenues and the treasury accounts; with the preparation of the annual budget and estimates; with the direction of the public works of the commune; with power over measures pertaining to ways of com-

The mayor's dual capacity.

munication; with the leasing of places in the markets, and the making of other contracts, leases, and concessions in accordance with forms duly prescribed by law; with various acts involving sales, acquisitions and business transactions in behalf of the municipality under rules duly laid down; with representation of the commune in matters of litigation, whether as plaintiff or defendant; with the execution of various other matters particularly specified, and in general with the carrying out of the decisions of the municipal council. The exercise of these general powers involves the appointment of most of the municipal employees, and this power of appointment also carries with it the power of suspension and removal, although certain limitations and safeguards surround the appointing and removing power.

First, as representative of the commune.

As an agent of the superior authority and an officer of the republic, each mayor is charged with the duty of seeing that the general laws are executed in the commune. To this end, for example, the mayor is an officer of the *état civil*, that is to say, must carry out the national laws touching the registration of births, deaths, marriages, etc. He has to do with the execution of the military-service laws, with the collection of the commune's share of national taxes, and with all other matters which the laws of the land may prescribe. If in the performance of these duties toward the state the mayor should be recreant or negligent, he is subject to suspension by the prefect of the department.

Second, as agent of the state.

This suspension must not be arbitrary, but must be for reasons fully set forth, and it may hold good for only one month, during which the matter must be referred to the central government. The minister of the interior may prolong the suspension to three months. The president of the republic, acting in the

Liability to suspension.

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council of state, may, for reasons which must be fully expressed, remove a mayor from his office. This process of suspension or removal applies equally to any or all of the mayor's adjuncts. Such action by the higher authorities does not carry with it any loss of membership or standing in the municipal council. The dismissal of a mayor by the President of the Republic holds good for one year, at the end of which the person dismissed becomes eligible again.

Power to suspend or dissolve councils.

Under previous régimes, the power of suspension and dismissal was far greater than that defined in the law of 1884; and the entire municipal council was in like manner liable to arbitrary suspension and ultimate dissolution as a penalty for having incurred the serious displeasure of the prefect or the central government. It still holds true that an entire municipal council may be suspended, or even dissolved, by decree of the President of the Republic; but no great hardship accrues to the municipality, for an election must at once be held to choose a new council, and the councilors who have been dismissed are reëligible and may seek vindication at the hands of their constituents. The power to suspend or dissolve a French municipal council under the present laws is to be regarded as one to be exercised at rare intervals, and upon occasions where it would appear that the interests of the commune itself would make this summary proceeding desirable. For example, if it were shown that the majority in a municipal council had been guilty of bribe-taking or gross corruption, the summary dismissal of the whole council would dispose conveniently of the situation.

Rarely used.

The suspension or dismissal of a mayor might on the one hand be due to his alleged mismanagement of municipal affairs, or on the other hand to his dereliction in those matters wherein he acts as the agent of

the state. It is chiefly in his capacity as an agent of the general government, charged with the local execution of the national laws, that he is under the surveillance of the prefect. Yet it remains true that a large part of the important municipal work of the council and mayor requires for its full validity the assent of the higher authorities. Thus the budgets of small communes must bear the approving countersign of the prefect before they can have legal effect, while the large municipalities must send their yearly volume of budgetary proposals to the minister of the interior, upon whose advice the President of the Republic either approves of it, or else returns it with criticisms for revision. I am inclined to think that the surveillance now exercised by the higher authorities over the financial transactions of the communes and municipalities is, upon the whole, beneficial rather than hampering and arbitrary. It holds the local governments, great and small, to businesslike methods, and to standards of promptness and efficiency. Anything like slipshod or irregular proceedings would meet with an instant check through this system. As in the British Local Government Board, —which exercises a somewhat analogous though not precisely similar supervision over local administration in England,—one finds in the great office of the Minister of the Interior at Paris a well-equipped bureau of permanent expert officials trained in every phase of municipal finance, and qualified to exercise intelligent supervision over the budgets of the French towns. I am not aware that there are any just complaints of capricious interference. And thus it may be asserted as a general principle that municipal initiative and freedom of action have found themselves greatly enlarged under the system of 1884, while the supervision of the higher authorities has been exer-

Surveillance over financial operations of municipalities.

Beneficial results.

Present relationship between central and local authorities.

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cised under due safeguards, and has not frequently or seriously interrupted the reasonable exercise of local self-government. Its chief effect has been that of a wholesome preventive against lax and irregular methods.

Character of French councilors.

It is difficult for a foreigner to satisfy himself that his knowledge is wide enough to justify him in expressing an opinion touching the average character and ability of the men elected in the French towns as municipal councilors. Formerly, it may be said, the councilors of the larger towns represented fairly well the property-holding or mercantile community. The tendency under the broader municipal suffrage which was introduced in 1884 has been to bring a larger number of working-men's representatives into the councils, and to replace the more conservative political elements to some extent by extreme radicals and socialists. It remains to be seen whether this recent tendency will prevail yet more widely, or whether on the other hand it may prove to be a passing phase. Taking a broad and general view, I have formed the impression that the municipal councils of France fairly reflect the prevailing standards of personal honesty and uprightness, and that in the large towns as well as in the smaller ones the intelligence of the community is very well represented. If I were to venture upon a dangerous comparison I should be disposed, after asking that due allowance be made for numerous exceptions, to entertain the view that in the present décade the French councils have been less substantial and responsible bodies than those of the large English and German towns, while far superior in these qualities to those of American cities of corresponding size.

More radical than English or German.

Superior to American.

The sessions of the French councils were formerly held with closed doors. One of the important inno-

vations of the law of 1884 was to throw the council meetings open, and thus to give public opinion a better opportunity to make itself felt in local affairs.

Open sessions.

The law arranges an elaborate classification of the so-called *attributions* of municipal councils. First,—and by far the most extensive under the present liberal régime,—are those functions which belong completely and finally to the councils, without necessity of submission to any higher authority. Then come the so-called *délibérations exécutoires après approbation*. These involve such matters as the alienation of municipal property, the making of long leases, the granting of charters to companies, the annual budget, and a few other matters. The council takes the initiative in all these things, but before its action can be deemed final the prefect, sitting in his prefectoral council, must give his formal approval. He must act promptly, and in case of his failure to indorse, the municipal council has the right of appeal to the minister of the interior. It is, in my judgment, a reasonable precaution not to permit a municipal council to grant valuable privileges or alienate public property without the surveillance and approval of the higher authorities. The check operates in practice to lessen the chances of bribery and corruption, and to prevent hasty and ill-advised action. The laws very carefully protect the municipalities against transactions in which members of the council can be shown to have an undue personal interest.

Functions of the councils.

Check upon franchise grants, etc.

The exercise of ordinary police authority is vested in the mayor. He has the power of appointment and promotion, and is charged by the laws with a long list of duties which are regarded as properly pertaining to the police administration. All appointments, however, must be ratified by the prefect of the department; and while the mayors have the right to

Mayor controls police.

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suspend police officers, no dismissal can be valid without the concurrence of the prefect. The laws further provide that the general organization of the police system of towns and cities having more than forty thousand people shall be prescribed in a decree emanating from the President of the Republic himself. In towns of less than forty thousand the mayor is entitled to exercise his own judgment in the organization of the police department. The rule which authorizes the President of the Republic to pronounce upon the police system of the large towns is not intended as an interference with municipal freedom and initiative, but rather as a means by which to insure general uniformity and efficiency in police methods.

President must pass upon police system of cities.

The description I have given of the police system of Paris would serve to convey a general idea of organization and method in Lyons, Marseilles, Bordeaux, and all the other provincial centers. The police system of Lyons, like that of Paris, is under what is termed a *régime exceptional*. A number of suburban communes are joined to the large urban commune of Lyons in order to constitute one general police district; and the prefect of the Rhône department, rather than the mayor of Lyons, exercises active control over the metropolitan police system of the "*agglomération Lyonnaise*." In all other French cities and towns without exception the mayor is the responsible head of the police department. I need not explain that one or more of his adjuncts or executive assistants may be deputed by him to assume executive charge of the work in part or as a whole, and that the municipal council, through a standing committee or otherwise, may exercise a considerable influence.

The Lyons police system exceptional.

The estimates of necessary expenditure for the maintenance of police operations, when submitted by the mayor, must be granted by the municipal

council. In the case of the smaller communes, the prefect of the department would have authority to inscribe in the budget such necessary sums as the municipal council had failed to grant by its vote. In like manner the President of the Republic, acting in the council of state, is empowered to inscribe in the budgets of the large municipalities (those having more than 40,000 people) the sums deemed requisite to maintain an efficient police organization. The administrative authority of the mayor, under his general title to exercise police power, extends to various measures for the protection of the public health, and includes the lighting and cleansing of the streets, together with the regulation of numerous matters which relate to the good order, welfare, and convenience of the community. The granting of building permits, the enforcement of rules having to do with the street line, and the control of many questions relating to construction are also enumerated in the definition of the mayor's police authority.

Police budgets are compulsory.

Scope of mayor's general police power.

The mayor's jurisdiction in matters pertaining to the street system is brought at certain points into very close and delicate contact with the authority of the prefect and the higher functionaries. This seeming possibility of conflict arises from the fact that the public highways of France are divided into several classes, each of which is subject to a different control. First there are the *routes nationales*, sometimes known as the system of national military roads. Radiating from Paris, and connecting the chief towns of the country, one finds a series of magnificent roads under the care of the national engineers, maintained in larger part at the expense of the republic, and coming under the control of the superior authorities. Each department, in its turn, has its own system of so-called *routes départementales*. These are admirable

Authority over the street system.

National and departmental roads.

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macadamized highways which connect the principal town of the department with the chief places of the arrondissements and cantons, and which bind together all the important towns of the division. They are controlled by the departmental authorities and maintained at the department's expense. Descending to the smaller circumscriptions, one finds a system of *routes vicinaux*, and finally, in the rural communes, the *chemins ruraux* (country roads), while the towns have their ordinary municipal street system.

Local roads.

But in all towns of considerable size there are main streets which belong to the system of national roads, and other streets which are regarded as belonging to the departmental system. The authority of the mayor and the municipal council over such main thoroughfares is not so complete as over the network of ordinary streets. Not to enter into an explanation which would involve many distinctions and technicalities, it may be quite sufficient to make the general statement that the authorities of the republic and those of the department, under the existing régime, show a constantly increasing tendency to make the mayor and the municipal council their trusted representatives in almost everything that has to do with those portions of the national or departmental road systems that lie within the limits of a municipality. When questions of street-railway franchises or of other concessions and privileges upon the street surface or beneath it arise, it becomes necessary for the municipality first to obtain a concession on its own behalf from the higher authorities, whereupon it can proceed to deal in its own way with the company or the individual seeking a franchise or concession. These matters rest in no confusion whatsoever. They all have been reduced to a system which, if elaborate in some cases, is always logical, definite, and lucid.

Different jurisdictions.

Franchise questions.

The network of streets and highways throughout

France has been brought to marvelous perfection through the application of the best engineering methods. The roads and streets of the minor divisions, as well as the chief routes of the nation and of the departments, have, as a rule, been laid out and constructed under the oversight of the trained engineers of the national public-works department. If the high state of administrative centralization which has prevailed during most of the century has rested in large part upon false and mistaken principles, let us not forget that some permanent benefits have resulted from it. And of all these benefits, perhaps the most tangible one has been France's incomparably complete system of macadamized highways. It was inaugurated, and has been developed, as a central and national rather than a local policy; and while it has been a costly creation, it stands as one of the great, permanent factors in the wealth-production of France. Its cost has been repaid many times over; and no one doubts the advantage of liberal yearly appropriations from national, departmental, and communal treasuries to maintain its perfect condition. Very few new roads are in the process of making in France, the system being practically complete. The repair, cleansing, and watering of the roads and streets of the entire country employ a vast army of laborers, and these tasks are almost as minutely and methodically performed for the highways that radiate throughout the country as for the boulevards of Paris.

Perfection of French road-making.

A national policy.

A profitable investment.

Maintenance and care of roads.

If the great provincial towns of France have attracted comparatively little attention as examples of modern municipal expansion and transformation, it is only because Paris has so preëminently represented French municipal methods; and also, perhaps, because the rate of development has not been so rapid of late in the French commercial and industrial towns

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The provincial capitals.

as in those of Great Britain and Germany. Nevertheless, one may find exceedingly attractive illustrations of the modern municipal movement in the recent progress of the provincial capitals of France. It is true these towns are not growing in numbers as fast as those of several other countries, but they are gaining very remarkably, while the population of France as a whole remains at a stand-still, and that of many hundreds of the rural communes has been appreciably declining.

Transformations like that of Paris.

Speaking in generalities, the period which has witnessed the transformation of Paris has seen a less marvelous but quite analogous change in the other French towns. This general movement may be illustrated by a citation of several concrete examples. The town of Lille,— chief place of the Nord department,— has now considerably more than two hundred thousand inhabitants. Forty years ago, in 1856, it had scarcely more than seventy-five thousand. It was at that time hemmed in by an ancient cincture of fortifications which gave it an elliptical form, the major axis being about a mile and a half long, while the shorter one was considerably less than a mile. Half of the old line of fortifications was demolished to make way for a broad central boulevard, which extends in a perfectly straight line across the present city. South of this line there was annexed a new area of greater extent than the old city, and this is laid out upon the Parisian system with noble boulevards and avenues, while the entire town within the present enlarged limits is encircled by a series of boulevards of great width and attractiveness. The public buildings are excellent specimens of modern French civic architecture. The town has its great public museum of art, one of the most noteworthy in France, its important municipal library, and its elabo-

Lille as an example.

Boulevards and street reforms.

Attractive appointments.

rate educational system extending from the *école maternelle* up to the university, with technical and industrial schools which bear due relationship to the textile, chemical, and other industries that flourish in the town. The street-railway system is not extensive, for Lille is an exceedingly compact town; yet there are thirteen lines radiating conveniently from one or two central points and serving not only the town itself but the adjacent suburban communes. This transit system is unified under a single ownership and management. It pays a modest compensation to the municipality for its privileges in the streets, and is subject to minute municipal regulation touching its fares, routes, and all the details of its operation.

Lille's street-railway system.

The advocate of the direct municipal ownership and operation of such supply-services as lighting or transit, will not find it advantageous to visit the French towns. He will find in them very few important experiments in this direction, and will conclude that Great Britain and Germany are the fields best worthy his attention. But if the French towns have in these regards pursued a policy less bold and brilliant, it is nevertheless true that their methods are not without useful lessons to practical administrators, especially to those of American cities. The French towns are all very compact,—that is to say, they have a dense population and a restricted municipal area. Their street-railway lines accordingly do not perform so important a function as those of American cities, which serve populations spread over far greater areas. The French government has, however, considered the subject of municipal tramways important enough to require very careful legislation. The consequence is that the street railways of each large French town constitute a rationally planned system. In almost every case it has been deemed best to grant

Lighting and transit services in general.

Street-railway methods.

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the street-railway franchises of a town to one company, in order to insure coherence and uniformity in methods, to secure transfer privileges, and to focus responsibility. The laws permit the municipal councils to exercise almost entire freedom in the detailed character of the franchises they confer, but the approval of the higher authorities is requisite in every case, and many precautions are taken to make it certain that the interests of the municipal treasury and the welfare and convenience of the citizens have been at no point sacrificed for the benefit of a private corporation. Some French cities obtain a percentage upon gross receipts, others receive a fixed annual rental, and still others exact a capital sum for the franchise, and agree upon a certain annual payment for each car in use. None of the French towns are in receipt of an important revenue from transit companies, but this is because the business of local transit has not yet grown to very lucrative dimensions. The Marseilles municipality obtains two or three per cent. of the gross receipts of the company which operates the tramway system. In Marseilles the omnibus lines are quite as important as those of the street-railway company, and they also pay a reasonable compensation to the treasury. The rates of fare on the street-cars of Marseilles are exceedingly low; and, indeed, it is through low fares rather than through large payments to the municipal treasury that the real benefits of public regulation accrue to the inhabitants of all the principal French towns. Twenty-five years is a usual franchise period in these French municipalities.

Franchises scrutinized by higher authorities.

Municipal income from transit lines.

Marseilles tramways and omnibuses.

The general omnibus and tram company of Lyons, which obtained its present charter in 1882, pays the municipality eighty thousand francs a year for its privileges. The Lyons cars have two classes, and the

Tramlines of Lyons.

rate of fare (in American money) is four cents for a first-class seat, and two cents for a second-class one, to any part of the city. The same company which operates the Lyons system owns that of Bordeaux and various other French towns. The Bordeaux franchise differs from that of Lyons in the character of the money payments it exacts, the principal payment taking the form of a fixed yearly charge for each omnibus or street car in active service. Bordeaux, which is one of the most ancient of the French cities, and which possesses architectural monuments of great antiquity, also furnishes a striking illustration of the new in juxtaposition with the old. In the heart of the town there remain many of the narrow ancient streets, and the inner boulevard lines show the location of the ancient walls. The city lies as a crescent upon a bend of the river Garonne, its water-front somewhat resembling that of New Orleans. But the modern town has spread far beyond the limits of the ancient city, and has its network of great tree-lined boulevards and avenues quite upon the Parisian model. In 1871 its population was perhaps one hundred and seventy-five thousand. In 1891 this was more than two hundred and fifty thousand, and Bordeaux ranked fourth in size among the French cities.

Bordeaux franchise.

Bordeaux's street system and general progress.

The largest town in France apart from Paris is Lyons, which will have shown by the census of 1896 a population of approximately four hundred and fifty thousand souls, within a municipal area of 4300 hectares,— about seventeen square miles. At the opening of the century the inhabitants of Lyons were only a little more than one hundred thousand. At the time of its modernization, beginning in about 1855, it had a population exceeding two hundred thousand. This had grown in 1881 to 377,000, and in 1891 to 416,000; and if the immediately suburban population belonging

The growth of Lyons.

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to Lyons as a general center were added, its present population would considerably exceed five hundred thousand.

Congestion of the old Lyons.

Compressed as its municipal limits would seem to be, the nominal area affords no true conception of the painful density of the Lyons population. The old city lay at the confluence of the Rhône and the Saône, where the two rivers hemmed the town in upon the point of a narrow peninsula. Artificial fortifications supplemented the natural water defenses, and the ancient city had no opportunity to grow laterally, and therefore it developed vertically. Its narrow, winding passageways were flanked by tenement-houses of

Ten-story tenement houses.

eight or ten stories in height, with not a few that were of still greater altitude. The congestion was dreadful, air and sunlight had only limited access, epidemics were never wholly absent, and the rate of mortality was frightfully high. Under the modern reform era, there has arisen a great new quarter in the east, across

The modern quarters.

the Rhône from the ancient peninsula; and this new town is laid out with broad modern streets crossing each other at right angles, with a few diagonal boulevards and avenues to perfect the system of main thoroughfares. In like manner the attractive hills on the west beyond the Saône have been made a part of the city; and in the north, where the outward curves of the two rivers gradually widen the peninsula, there is a further development of the modern city. Meanwhile, since 1855, there has proceeded the difficult task

Reforming the inner city.

of modernizing the ancient quarters, plowing the direct lines of a main street system through the labyrinth, and introducing sanitary reforms into the congested districts. The ancient wedge is now connected at numerous points with the new quarters east of the Rhône and west of the Saône by handsome bridges, while both streams are bordered for a long distance with magnificent broad and tree-lined quays.

Thus the second city of France is by no means to be despised as an instance of urban modernization. The recent civic edifices are numerous and of striking architectural merit. In its ancient days Lyons was supplied with water by three great Roman aqueducts, one of which is said to have been more than fifty miles long. The present supply is pumped from the river Rhône at a point some distance above the city, and forced by steam-power into reservoirs which are several hundred feet higher than the level of the central area. Modern fastidiousness in sanitary matters has led to measures for the filtration of the water supply and for the improvement of the drainage system,— although there will long remain a field for energetic effort in the sphere of sanitary ameliorations.

Recent public works.

Water and drainage.

The chief French provincial towns, if one may generalize sweepingly, have indeed much more to show the visitor who is attracted by imposing boulevards, by elegance in public architecture, by well-kept parks and squares, by interesting and artistic monuments, and by the other externals of municipal aggrandizement, than they can reveal to the inquirer who cares most for the achievements of sanitary science and for kindred social services. In this regard they have much to learn from the large British towns, which, while less attractive in many of their external appointments, have as a rule accomplished far better results in the provision of pure water and wholesome drainage, in housing reforms, and in aggressive sanitary and social administration along various lines.

Outward aggrandizement of French towns.

Sanitary reforms proceed more tardily.

Marseilles, the greatest of the French seaports, and the French town which ranks next to Lyons in size and importance, has held a most unenviable place among the great towns of Europe as regards its health conditions. It has suffered from scourge after scourge of cholera, smallpox, typhoid fever, and the infectious diseases that are especially fatal to children. Its aver-

Marseilles — its health conditions.

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age death-rate through the past thirty years has been higher than that of almost any other large town in the world with which comparison could reasonably be made. Its location as a cosmopolitan Mediterranean port has had something to do with the prevalence of infectious diseases, but the fault has rested chiefly with its lack of a proper system of sewers, its unreformed and densely populated ancient slums, and its tardiness in the adoption and energetic enforcement of modern sanitary administrative methods. The past three or four years have witnessed decidedly hopeful improvements in Marseilles, and its thorough sanitary regeneration may now be deemed a question of only a few years more. Its commercial prosperity has been enhanced of late by the joint efforts of the municipal authorities, the national government, and the local Chamber of Commerce, which is a semi-official and governmental institution. Its harbor facilities have been greatly improved, and an act of 1893 authorizes the further expenditure of twenty million francs for harbor works. Its population in the year 1801 was 111,000. This had grown to more than four hundred thousand when the census of 1891 was taken, and the commercial and industrial prosperity of the town insures a steady growth for years to come.

Crowded slums and bad sewers.

An improving outlook.

Growth of population.

The existing area, which comprises 22,801 hectares, is traversed by numerous boulevards of very imposing character, with the Parisian adjuncts of shade-trees, good pavements, and effective cleansing services. The network of lesser streets has not hitherto been so fortunate in these circumstances of paving and cleansing. But Marseilles has for some years had its group of brilliant and enlightened municipal reformers, who have unsparingly cited, for the awakening of their fellow citizens, the best results achieved in other towns, not only those of France but also those of Ger-

Area and main thoroughfares.

Work of local reformers.

many, Belgium, Italy, England, and even of America. The consequences have been gratifying. Since 1890 the death-rate has shown a declining tendency, which it is hoped will not be followed by any reaction. Thus the rate of deaths for 1894 was 28 per 1000 of population, and the average rate for the five years, 1890–4, was about 30; while for the corresponding period ten years earlier the rate was approximately 34.

Death-rate statistics.

Sanitary improvements, if carried out to the full measure of the programmes urged by the local leaders of municipal progress and renovation, would promptly reduce the death-rate to 25, and, in a very few years, to 20, which was the Paris rate for 1894. When sanitary arrangements at Paris were far less perfect than they are to-day, the death-rate was forty or fifty per cent. higher than now, and the deaths outnumbered the births. But although the Paris birth-rate (nearly twenty-five per 1000 in 1894) is a very low one when compared with that of European cities outside of France, it has now risen somewhat, while the death-rate has steadily declined, and the population begins to show a slight net increase, apart from the influx of non-Parisians.

Compared with the Paris death-rate

Births and deaths in Paris.

But speaking in general of the French towns, the sad fact remains that their deaths every year exceed their births. Thus in Marseilles the deaths for 1894 were 11,633, and the births only 11,284. In Lyons, the year being unusually favorable to health, there were 9020 deaths and 8333 births. The difference in Lyons has been much greater in most years. Thus in 1890 the deaths were 9832 and the births only 8101. Averaging a number of consecutive years, the deaths in Lyons have been from fifteen per cent. to twenty per cent. more numerous than the births. I am optimistic enough to believe that a balance will have been reached at Lyons and Marseilles, and, indeed, that

Excess of deaths in Marseilles and Lyons.

Evidences of a change for the better.

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there will have been a final turn in the scales, by the year 1900. The mortality of infants under one year old has begun to show a marked decline, and in various ways the results of an improving sanitary régime are making themselves apparent. In Bordeaux, where the deaths have usually been from five to fifteen per cent. more numerous than the births, the year 1894 showed a slight excess of births,—somewhat less than one per cent. As for Lille, the next town in size, the balance has been upon the right side for some years, and it tends to increase in a satisfactory manner. The birth-rate regularly exceeds thirty per 1000, and in 1894 the death-rate fell from its former average of twenty-five or twenty-six to less than twenty-two; so that the natural increase for the year was about two thousand, in a population of 200,000. Toulouse has for a number of years presented the dismal spectacle of a town with a birth-rate of about nineteen and a death-rate of about twenty-six. In 1890 there were 2592 births and 4119 deaths; and 740 of the deaths were of children less than one year old. In 1894 there were 2879 births and 3780 deaths, with 498 deaths of young infants.

Bordeaux.

Births and deaths at Lille.

Toulouse — a bad record.

The situation improves, but its unfortunate character can scarcely be comprehended from these summary figures except by those accustomed to draw inferences from comparative vital statistics. The German town of Elberfeld is similar to Toulouse in population, though a little smaller. The Elberfeld records for 1894 show 4555 births, and 2181 deaths, including 650 deaths of infants (less than one year old). The large number of infant deaths in the German town must be compared with the high birth-rate. All the German and English towns are gaining population rapidly by the maintenance of a high birth-rate side by side with improvements in health conditions which

Comparison with a German town.

have greatly lowered the death-rate. Thus in 1894 Leeds and Sheffield, never in times past very famous as health resorts, had respectively 6927 and 5994 deaths, and 12,502 and 11,267 births. The infant deaths were 1940 and 1766. Sheffield had as many births as Marseilles and only half as many deaths, its population being ten or fifteen per cent. smaller. Leeds, also smaller than Marseilles, had 1200 more births and 4700 less deaths. Frankfort-on-the-Main is somewhat like the French cities in the fact of having a low birth-rate, and the same remark applies to Stuttgart. But these two German cities have of late succeeded in reducing their death-rates to seventeen or eighteen per 1000, while their birth-rates remain at from twenty-six to twenty-eight. And it is for the French towns to follow the sanitary policies that have been so remarkably successful in reducing the death-rate of Frankfort and Stuttgart. Strassburg and Metz, in the ceded strip, retain the French characteristic of a low birth-rate, almost evenly balanced by a death-rate of twenty-three or thereabouts. In St. Etienne, Nantes, Le Havre, Roubaix, Rouen, and other smaller French towns, the average figures of births and deaths now nearly offset each other, local circumstances differing considerably however, since for example the births were strongly in excess in Roubaix in 1894, while the deaths heavily preponderated in Rouen. The total balance for all the important towns of France has hitherto remained upon the unfavorable side, with that balance steadily diminishing, and now approaching the vanishing point.

Leeds and Sheffield compared with French towns.

Frankfort and Stuttgart as instances of sanitary progress.

Strassburg and Metz.

Roubaix Rouen, and other towns.

By the census of 1881 there were found to be forty-seven towns in France which had more than 30,000 inhabitants each. This number had increased to fifty-six in 1891, while only 232 of the more than 36,000 communes had a population exceeding 10,000. The sixth in size of the French cities is Toulouse, with

Some population figures.

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nearly 150,000 people in 1891, and the next is St. Etienne. The other towns having more than 100,000 by that census were Nantes, Le Havre, Roubaix, Rouen, and Rheims. The list of towns having a population ranging from 30,000 to 100,000 comprises many places of great historical fame and of interesting local characteristics. As a rule, these French towns were walled in the old days, and the comparatively recent removal of the fortifications has resulted in encircling boulevards and has given the towns their most noteworthy physical features.

Walls and boulevards.

This description applies notably to Toulouse, one of the most ancient of French cities, the capital of old Languedoc. Its congestion as a walled city has left a legacy of unwholesome conditions that it will require a long time to reform. Handsome boulevards replace the walls, and a few new streets have within twenty years been cut through the close tangle of the inner city; but this task of inner reconstruction has made only slow advances. In the newer zone, however, outside the former wall of cincture, the town is modern in its plan. Its swift river, the Garonne, furnishes a water-supply that is fairly good by reason of a system of natural filtration, and also suffices to carry off the drainage. I have spoken of the high death-rate at Toulouse; and the vicious condition of the ancient tenements surviving in the heart of the town sufficiently accounts for it. Such sanitary and street improvements as the municipality has ventured to make have been promptly rewarded, as the vital statistics have duly testified.

A glimpse at Toulouse.

The visitor who enters France at Le Havre almost invariably makes haste to reach Paris, unmindful of the two excellent representatives of the French provincial city which lie in the valley of the Seine between Paris and the sea. Le Havre itself ranks next

A note upon Le Havre.

to Marseilles in importance as a French seaport, and although it was once a walled and fortified place, it has been recast upon thoroughly modern lines and possesses handsome streets with the full complement of improvements that modern municipal energy is demanding everywhere. The development of the harbor facilities, constantly progressing, is the most important and creditable of the public works with which the municipality has concerned itself.

The metamorphosis of Rouen.

Rouen, which is perhaps eighty miles from Le Havre by the course of the Seine, and fifty-five miles by rail, is also an important seaport by virtue of the great depth of the Seine estuary, whose tidal movement extends even beyond Rouen. This city of ancient fame, the capital of old Normandy, typifies as completely as any other town in France outside of Paris the modern processes of reconstruction which characterized the Second Empire, and which were at the height of their activity in the period from 1860 to 1870. The historic walls of Rouen may be perfectly traced in the line of broad boulevards which form an irregular ellipse around the inner city. In scarcely any other French town has the plan of a modern system of main thoroughfares inside the ancient limits been so completely carried into execution as in Rouen; and the town might well be described as a miniature edition of Paris. The reminders of Paris are, indeed, very numerous. For example, at Rouen, as at Paris, the river Seine has been flanked by miles of magnificent stone quays on both banks, and the river as thus compressed keeps its own channel deep and clear. Eventually Rouen will annex its thriving suburbs, and it will thus gain rank with the towns of approximately 200,000 people.

A miniature Paris.

A traveler who touches French soil at Calais may readily visit the stirring and historic town of Lille,

CHAP. II. of which I have already said something; and while at Lille he should also visit Roubaix, in the immediate vicinity. Roubaix is famous as the center of the French woolen industry, as Rouen is the center of cotton manufacture. It is true of Roubaix as of Rouen that the census does not give credit for the full population that belongs to the place as a commercial town. The census of 1891 ascribes to Le Havre 116,000, to Roubaix 115,000, and to Rouen 112,000; but on the very outskirts of Roubaix is Tourcoing with a population of more than 65,000, and there are other populous manufacturing towns in the immediate vicinity. Thus Roubaix stands at the center of an urban population of perhaps 250,000, where at the opening of the century there were hardly 10,000 people living. Here we find, therefore, a manufacturing community which has developed in a manner comparable with those of the north of England.

The industrial town of Roubaix.

Rapid expansion.

Roubaix forms an exception to the rule of old fortified towns, whose modern street systems take their key from boulevards following the lines of obliterated walls and moats. But in resuming the journey to Paris one passes Amiens, the capital of the ancient province of Picardy,—a place well worth study for what it reveals of the process by which an ancient walled city may be turned into a modern boulevarded town. St. Etienne, like Roubaix, is a specimen of the modern manufacturing town which has sprung up rapidly in the nineteenth century, and has no historical background. Its street system is strikingly different from those of most other French towns, for the simple reason that it was never a walled city, and its ground-plan, therefore, lacks the usual tendency toward concentrics and radials. St. Etienne is regarded as having grown more rapidly in the last half-century than any other French town. It is in the heart of the

Modernized Amiens.

The new town of St. Etienne.

best coal region, not far from Lyons, and is the French center for iron and steel manufactures and the great metal-working industries,—a Sheffield or a Pittsburg.

Not only is the framework of municipal government identical for all these French towns under the terms of the general municipal code which I have already described, but very many of the active functions of the municipal corporations are uniform throughout the towns, because they are exercised in conformity with the requirements of general laws. Thus the educational system, while largely in the hands of the municipal authorities as a branch of local administration, is strictly regulated by national enactments. Throughout France primary instruction is obligatory and free. School-books and various appliances needful in schools are gratuitously supplied. Since 1886 the public schools have been entirely in charge of lay teachers. The caisses des écoles, which I have described in my account of educational work in Paris, are found in connection with schools throughout the whole of France, and have everywhere the same characteristics. They possess full authority of law, yet leave large room for voluntary action. In Marseilles, Lyons, and the other large towns, no less than in Paris, the caisse des écoles looks after the health and comfort of the children, supplies warm meals from school restaurants, gives shoes and clothes to the needy, organizes vacation holiday trips, provides prizes for faithfulness and merit, and in a score of ways enhances the value of school life and work, and promotes the wholesome development of the rising generation. The system of écoles maternelles, under which free instruction is given by kindergarten methods to the children below six years of age, also prevails in all the French towns as well as in Paris.

Uniform methods and functions.

The system of education.

The caisses des écoles.

Kindergartens.

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Compulsory instruction.

Those features of the law which make instruction compulsory between the ages of six and thirteen are remarkably well enforced; and particularly since 1890 the number of French children growing up without instruction is too small to be reckoned. It would at most constitute less than one per cent.

National control of education.

The standards of education, from the école maternelle up to the university, are fixed for the whole country by the central educational authorities, under the general oversight of the minister of public instruction. The normal schools, which instruct the teachers, are jointly national and departmental, and the examination of all teachers is conducted under the auspices of the higher authorities. Thus the criteria of excellence are uniform throughout France, and the great army of teachers, men and women, constitute a branch of the national civil service. Teachers' salaries are regulated on a scale prescribed by the national government. The employment and assignment of teachers belongs to the departmental school authorities, with the prefect in general control. Appointments are made in a businesslike fashion from the departmental lists of applicants who have passed the examinations and have been duly certificated and registered.

Teachers belong to the nation's civil service.

Municipal school boards.

The municipal school board is presided over by the mayor, and most of its members are designated by the city council,—usually, though not necessarily, from its own membership. The board also contains, however, one or more of the school inspectors, who are the appointed representatives of the higher educational machinery of the nation. French school legislation since 1880 has been not merely voluminous but also of the most intelligent and valuable character. It has forced good methods into the remotest hamlets, has made it obligatory upon the municipalities and communes to provide suitable buildings, and has given

universality to those attractive side-features of school life which I have endeavored to describe in my account of the schools of Paris. In particular, it has endeavored to promote every phase of practical instruction for the development of health and physique and the skilful use of eye and hand, and has made it the duty of the schools to teach the principles of morality, industry, and thrift, and of household and business economics, together with the keenest type of French patriotism.

Spirit of school life and work.

For the larger towns, the general government has been ready to subsidize apprentice schools and practical trade and technical institutions, while the municipal councils themselves have shown a commendable zeal in this direction. At Lille, for example, there has lately been completed a magnificent institution for the training of young men who are to supply the knowledge and skill that the great textile and chemical industries of the north of France will require. At St. Etienne, the technical instruction naturally gives special emphasis to mining engineering and the processes of metal-working. At Marseilles and some other southern centers, the ceramic arts, with other lines of manufacture, are especially provided for in the technical schools. In all the important towns, moreover, one finds schools of the fine arts and of artistic designing, supported by the municipalities and subsidized by the general government, while commercial schools, in like manner supported as public institutions, are found in every town of importance.

Technical and practical education.

Municipal trade schools in all industrial centers.

The organization of assistance publique throughout France employs precisely the same principles and methods which I have set forth as in operation in the department of the Seine. Each of the other departments of France has its general task of supervision, while the municipalities and smaller communes in turn

Poor relief.

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possess their local boards of assistance publique and their bureaux de bienfaisance. There are in France from 15,000 to 16,000 of these bureaux de bienfaisance, carrying on their work in a manner quite in keeping with that which I have described as pertaining to the twenty bureaux in the Paris arrondissements. The mayor is at the head of the municipal bureau, unless he may have designated one of his adjuncts to represent him in that capacity. The municipal council is represented by two or three members which it designates; and several other members, usually four, are selected for four-year terms (one going out each year) by the prefect of the department, either from the municipal council, from other official or professional quarters, or from the non-official citizens who are interested in public charity. About these official bureaux de bienfaisance as charity-centers one finds that most of the volunteer work of poor relief has learned to rally, for the advantages of union and concentration. Many thousands of volunteer helpers, like the commissaires and dames de charité of Paris, whose work I have described, are found aiding the provincial bureaux de bienfaisance. As for the care of the insane, the maintenance of establishments for the blind and for deaf-mutes, the administration of the laws relating to the succor and care of unfortunate children,— these matters, as well as the system of penal institutions, belong to the administration of the respective departments rather than to the municipal governments.

Organization of bureaux de bienfaisance.

Departmental charities.

The public pawnshop (*mont-de-piété*) is a municipal institution which exists in more than forty of the chief provincial cities and towns of France. The mont-de-piété is carried on under the control of a board or commission, over which the mayor always presides. The other members of the board are selected in three equal parts from (1) the members of the municipal

The municipal pawnshops.

council, (2) the administrators of charitable institutions, and (3) the other citizens of the town. The benefits of these institutions in Lyons, Bordeaux, Marseilles, Lille, Rouen, and other populous industrial towns, are not one whit less than those conferred upon the working-people of Paris by the great metropolitan mont-de-piété system which I have described in the previous chapter.

Much more universal throughout France than the monts-de-piété are the caisses d'épargne, or savings-banks. These are to be found in all the important towns, without exception. At the opening of 1894 there were 543 municipal and local savings-banks, with branches and receiving offices which increased the total number of places where savings might be deposited to somewhat more than two thousand. In very many instances one finds the savings-bank itself located in an important town, with its branch offices in outlying villages for the convenience of depositors. The development of the savings-bank system, under the joint auspices of the municipal governments and local societies of public-spirited citizens, must be deemed one of the most significant and important phases of social progress that can be observed in France. Taking the entire population of the country, one finds that for the year 1893 there were 6,173,000 depositors in these municipal savings-banks, or 161 for every 1000 of the population. Thus for every six men, women, and children in France there is a municipal savings-bank account, the average value of which exceeds 500 francs. The total yearly deposits in these banks is now, in round figures, 1,000,000,000 francs, while the accumulation of deposits at any given moment is considerably in excess of 3,000,000,000 francs. I have not included in these statistics the figures that belong to the national postal savings-bank system,

Municipal savings-banks.

Remarkable growth of the system.

The postal savings-banks.

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which,—though much younger and less important than the municipal savings-banks,—is showing a rapid development. Thus in 1893 the national postal system was patronized by 2,327,000 depositors, who confided to it more than 335,000,000 francs of their savings.

A bank account for every family in France.

Summing up the two systems, therefore, one finds a savings-bank account for every four and a half people, or to speak in a general way, one for every family. The national postal savings-bank system was begun in 1882, and so rapid has been its progress that at the end of 1894 it could show about 2,500,000 depositors. As for the municipal system, the number of depositors has multiplied threefold in twenty years. The savings-banks are prudently managed under national surveillance, and the local commissions which supervise their operations are composed of citizens who serve without pay. The funds are almost entirely invested in the obligations of the state; and thus the

Investment in state obligations.

savings-bank systems are a powerful supporter of the national credit, and their existence and remarkable popular success help to explain in part the ease with which the governmental financiers have been able to manage an immense interest-bearing debt. An analysis of the depositors shows that the vast majority belong to the laboring and industrial classes. The small

Analysis of depositors.

shopkeepers form a considerable element, and the contingent of minors of both sexes is exceedingly large. Numerous as are the savings-bank patrons in Paris, the number is still greater proportionally among the working-people of Lyons, Marseilles, Bordeaux, St. Etienne, Orléans, and many other industrial centers.

Municipal revenues.

The French municipal treasuries derive their incomes from two principal sources. One of these is the system of direct taxes, the other is the octroi, or local customs system. The direct taxes collected for local

purposes are levied by means of so-called *centimes additionnels*. To understand the levy of these centimes additionnels it is necessary to glance for a moment at the French system of direct taxes. This system is one of long standing, and it has become fixed in the habits of the nation. There are several important direct taxes. The first of these is the *contribution foncière*, a tax levied on the value of land and buildings, the building improvements being assessed separately from the land. Another is levied upon all house-occupiers, based upon the amount of rent they pay, with extra levies for each servant kept. Still another takes the form of an elaborate, graduated series of taxes upon business callings of various kinds, and may be considered an annual trade-license system. These schemes of direct taxation exist primarily for the benefit of the national treasury. The rates of levy are fixed from year to year in the national budget, and the amount to be collected by means of each of the different direct taxes is determined. Apportionment is made by the national authorities to the eighty-seven departments. The departmental authorities, in turn, apportion the sums to be raised among the arrondissements. The arrondissement councils proceed to distribute the burden to the communes, great and small.

The direct taxes.

Local apportionment.

The taxes thus falling upon real estate, upon householders, and upon business pursuits are heavy enough to make it seem practically out of the question to raise the sum total of local revenues by assessments of the same nature. Nevertheless, it is found convenient to provide a considerable part of the local income by the very simple device of adding something for municipal purposes to the direct tax-rates before any collection is made. These local augmentations are known as the centimes additionnels. A centime is the hundreth part

The "centimes additionnels."

CHAP. II. of a franc; and thus if the amount which a given municipality must collect for the departmental and national treasuries by means of a tax on land and houses is one hundred thousand francs, an imposition for local purposes of fifty centimes additionnels would mean that the total amount to be collected from real estate is one hundred and fifty thousand francs, of which fifty thousand will be retained for the local treasury, and a hundred thousand remitted to the superior fiscal authorities. Subject to the approval of the prefects, there is a wide range of discretion permitted to the municipal councils in the extent to which they may employ the device of the centimes additionnels, and the practice in different places varies widely. A recent copy of the annual report upon the financial operations of all the communes of France shows that the average was fifty-four centimes additionnels for the year 1893,—which simply means that of the amounts collected by direct taxes the communes retained for local purposes a little more than one-third. The proportion varies greatly, however, in the different French towns.

The octroi system.

For most towns having more than four thousand inhabitants, however, the largest source of income is the octroi system. The total amounts collected by the authorities of the 1513 municipal octroi systems in 1893 was in excess of 303,000,000 francs. About one third of this amount was collected upon wines and other alcoholic liquors. Food-supplies yielded approximately one third, and the remainder may be ascribed to building materials, fuel, and other heavy substances. It happens that the octroi revenues are almost evenly divided between Paris and the other fifteen hundred towns.

The chief source of income.

In general it may be said that all French towns of considerable size rely upon the octroi receipts as their

principal source of municipal revenue. Thus the town of Lyons, whose ordinary receipts for 1893 were about twelve million six hundred thousand francs, derived 8,750,000 from the octroi. Of the nearly four million francs remaining, perhaps half was derived from the centimes additionnels, while the rest accrued from a variety of sources, including the incomes of productive municipal departments. The receipts of Marseilles for the same year somewhat exceeded fifteen million francs, of which the octroi yielded 9,000,000 francs of ordinary revenue and 2,000,000 francs for special purposes. The municipal income of Lille was somewhat less than seven million francs, and the octroi yielded 5,000,000. Roubaix derived 2,500,000 francs from the octroi system, the total income of the municipality being 4,135,000 francs. Rouen, whose revenues were 4,800,000 francs, obtained 3,700,000 francs from the octroi. Le Havre, with receipts slightly exceeding four million nine hundred thousand francs, derived 3,500,000 from the octroi. Toulouse, whose income was not quite five million francs, was indebted to the octroi for 3,280,000 francs. These instances, which are entirely representative, will suffice to show how large a factor the octroi system is in the finances of the French municipalities.

Revenues of Lyons and Marseilles.

Of Lille, Roubaix, Rouen, and Le Havre.

The octroi system is to be viewed as an historical fact. If it were non-existent, it is scarcely conceivable that any one would seriously advocate its establishment as a method for the collection of local revenues. In the smaller towns the system is undoubtedly an expensive one, although I am not inclined to consider the cost of the maintenance of the octroi as the principal argument against its employment for the larger towns. The octroi is by no means a compulsory arrangement, and the law provides for a suppression of the system by any locality which chooses to dispense

As to the character and future of the octrois.

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with it, after a careful investigation, in which the higher authorities participate. The point of the inquiry would have to do with the question whether or not the community could safely and satisfactorily substitute other sources of revenue. As yet, no towns of importance have emancipated themselves from the girdle of local custom-houses. If the finances of the national government justified the abandonment of the direct property taxes, so that these might be exclusively available for local purposes, there would unquestionably be a rapid movement among the towns for the abolition of the octroi; and with such a movement fairly initiated, the whole system would be doomed. When the longed-for era of disarmament arrives, and national expenditures are correspondingly lightened, it will perhaps become feasible to accord to localities the full benefit of real-estate taxation, with the proviso that the octroi system,— which is one of the few medieval survivals in the institutions of France,— shall be totally obliterated.

Municipal debts.

While the debts of the French towns are by no means insignificant, it happens that the debt of the commune of Paris alone is much in excess of the sum total of the indebtedness of all other communes, great and small. Thus the official reports for 1892 show that whereas the capitalized interest-bearing debt of Paris amounted to somewhat more than 1,920,000,000 francs, the aggregate indebtedness of all the other communes of France was 1,373,000,000. The debt of Marseilles was in that year 106,000,000 francs, this outlay being represented by various public improvements, principally, however, those pertaining to harbor facilities. The debt of Lyons was 86,500,000 francs, that of Le Havre (largely for harbor improvements) 48,000,000 francs, that of Rouen 41,000,000 francs, and that of Lille 40,000,000. The description

I have given of the modernization of street systems in the French provincial capitals will readily explain a considerable share of the outstanding indebtedness, while improved water-supplies, sewers, new school buildings, public abattoirs, and various architectural and sanitary improvements would sufficiently account for the rest.

The general outlook for municipal progress in France.

I am inclined to believe that the conditions of life in the French provincial towns are destined to improve very rapidly in the course of the coming decade or two, and that, for France at least, the rate of movement of population from the country to the towns is destined to increase somewhat rather than to diminish. On the other hand, the distinction between town and country in France is likely to become less emphatic, inasmuch as the suburban tendency begins to make itself felt, the compactness and density of town life having already passed its maximum and begun to grow appreciably less. Improved transit systems will rapidly widen the area of municipalization; and thus the country at large will become more urban in the character of its improvements, while the towns will become more countrified, by reason of their tree-lined thoroughfares, their outlying parks, and their villa-built suburbs.

## CHAPTER III

## THE SYSTEMS OF BELGIUM, HOLLAND, AND SPAIN

THE account that has been given of the character and historical development of the French system of municipal administration will make it a comparatively brief and simple task to outline the systems of several adjacent countries. It has been stated in the opening paragraph of this volume that French influence was dominant in the modern revision of the administrative framework of other European peoples; and this remark applies particularly to Belgium, Holland, Spain, French-speaking Switzerland, and Italy. Each of these countries has modified the French system in numerous ways for its own practical uses; yet all of their municipal codes of to-day may for our purposes be regarded as so many variations of one general type. The differences of detail are much greater than those that distinguish from each other the English, Scotch, and Irish systems; but on the other hand they are much less than those that mark the systems of different states in the United States.

The French system as a type.

The Belgian provinces with approximately their present bounds are very ancient, and were practically independent of one another until the House of Burgundy, in the fourteenth and fifteenth centuries, knit them together with a centralized administration which has from that time to the present day given them a common destiny. After the crumbling of the

Medieval Belgium.

Carlovingian Empire, the Belgian provinces had come under the rule of feudal princes and barons, whose sway had in turn been broken down by the rise of the "communes," or municipalities, a movement beginning in the eleventh century. The communes reached a very high degree of prosperity, privilege, and local autonomy in the thirteenth, fourteenth, and fifteenth centuries. The great part which the feudal princes of Belgium played in the Crusades had enabled the communes the more successfully to assert themselves. Each commune, with its elected council and its college of magistrates, composed of a burgomaster and several échevins, formed in itself a miniature free state. The House of Burgundy superimposed a superior central administration upon provinces each of which had already its long-standing provincial organization and its highly developed communal system. In order to produce a larger unity, the measures which depressed and enfeebled the communes in the fifteenth century and subsequently were perhaps justified. We are accustomed to regard the virility of Anglo-Saxon institutions as due in large part to the persistence of the old-time local units of government, the townships. It is, however, well to remember that the French and Belgian communes are as ancient and as worthy of respect as the Anglo-Saxon townships. Modern constitutional improvements in Belgium have been wisely grafted upon the ancient structure of provinces and communes.

Rise of the communes.

Miniature states.

Central amalgamation.

Historic dignity of the communes.

The economic character of the pre-Revolutionary régime in Belgium was far from being so bad as that of France. In Belgium, in the eighteenth century, the nobles and the Church bore their respective shares of taxation, and the masses were comparatively comfortable. The more violent phases of the French Revolution were fortunately not witnessed in Belgium,

Belgium and the French Revolution.

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while the beneficent and just principles of the new political philosophy of France had free course and general acceptance in the neighbor country. In 1794 Belgium was annexed by the French Republic, and it shared the fortunes of France until the downfall of Napoleon in 1814. Compared with the old France, the old Belgium was certainly an elysium; but its society was lethargic and unprogressive. The Revolution and the French intrusion made an awakening that was exceedingly rough and uncomfortable, but thoroughly beneficial in the end. As a primary-school summary of Belgian history quaintly remarks: À la suite de la victoire de Fleurus, la Belgique passe à la France, dont le régime a ses rigueurs, mais nous procure de précieuses libertés." The transformation wrought in a very few years is well summed up by a spirited Belgian historian: "1789, c'est la vieille Belgique, la Belgique provinciale et communale, telle que l'ont formée les siècles, avec ses antiques priviléges, ses rouages compliqués, ses classes juxtaposées, ses trois états, son clergé tout-puissant, son esprit particulariste et conservateur — 1799, c'est la Belgique nouvelle, la Belgique unifée, telle que l'a modelée le clair génie de la France, avec son administration simple, sa égalité civique, son clergé fonctionnaire, son esprit centralisateur et progressif." The existing civil and criminal codes, the machinery of civil administration, and the arrangements and procedure of judicial tribunals have grown essentially out of those introduced from France in the Napoleonic period.

Annexed to France.

A transforming experience.

Permanent results.

The allied powers, convened at Paris in 1814 to arrange terms of peace with France, determined upon the fusion of Belgium and Holland, and the establishment of the kingdom of the Low Countries, under the rule of the Prince of Orange as William I. The new power was erected upon the basis of a constitu-

Union with Holland.

tional document known as "the Fundamental Law of 1815;" and a very liberal charter it was, when one considers the mood in which the conquerors were, and their dislike of advanced and "Frenchified" political notions. It had been adopted by Holland in 1814, and its benefits were extended to Belgium by the fusion of the following year. The Fundamental Law recognized most of "the rights of man," gave the provinces and communes their own administration, and, in short, established modern representative institutions. But while the government of William was in the main advantageous and just, it was in minor respects exceedingly unpopular and obnoxious in the Belgian provinces. The Belgians for the most part talked French, and they disliked Dutch as the official language. Holland was Protestant, while Belgium was intensely Catholic, and the Church found itself uncomfortably fettered. Dutch views seemed to prevail in everything, to the growing exasperation of the Belgians, who felt themselves under a foreign yoke rather than an integral part of a self-governing country. The Belgians all admit that what they term the *régime hollandais* was highly favorable to the development of their industry and commerce, and notable for the great impulse given to education; but while acknowledging and respecting the many superior qualities of the Netherlanders, the Belgians found the union ill-assorted and incompatible. They admired the Dutch as neighbors, but could not endure to keep house with them. In 1830, they pronounced themselves divorced from a union which had been forced upon them without their consent by the Treaties of Paris and the Congress of Vienna, and they succeeded in maintaining an independence which at first was viewed unfavorably by Europe and vigorously opposed by Holland. A provisional govern-

Fundamental Law of 1815.

The "régime hollandais."

Separation in 1830.

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ment declared Belgium an independent state, and called a national congress to adopt a constitution.

Constitutional convention of 1830.

Few constitutional assemblies have ever been more thoroughly representative, and few have ever shown a higher degree of political sagacity, than that which assembled at Brussels in November, 1830, and completed its labors in the following February. Within a period of about forty years Europe and America had witnessed a series of most remarkable constitutional experiments. New principles had been developed, and what we term the modern era of constitutionalism had fairly set in. There were in this convention a number of able and brilliant men, and the discussions were of the most important character. Some of the two hundred members believed that the time had come to establish a republic; and, with the House of Orange forever excluded by a formal vote, the question seemed to rest upon its pure merits. It was decided, after a discussion of the actual situation, domestic and foreign, that an hereditary constitutional monarchy, with ministerial responsibility, and with large provision for provincial and communal home-rule, would be the best form of government for Belgium, and only thirteen votes dissented, although the republic was frankly avowed by many to be their ideal.

Popular sovereignty.

The sovereignty of the people was, however, declared, and not a vestige of the divine right of kings was left in the reconstituted system. The nature and limitations of the monarchy were, fortunately, determined before the monarch himself was selected.

The Belgian constitution-makers of 1830 understood the nature of their task. It was theirs to preserve in unified and harmonious form the old institutions of the provinces and communes, and to weave into the new fabric those modern liberties, individual and social, which the French Revolution had rescued from

the débris of feudalism, and which the French régime in Belgium had left as an imperishable souvenir in the political creeds, if not in the ordinary practice of the country. Then there was the very respectable constitution of Holland, which a joint commission of Belgian and Dutch notables had revised in 1815, and under which the people of the two countries had now lived for fifteen years. This document might well be taken as the basis of comparison, the point of departure. Then the French Revolution of 1830 had produced exemplary legislative changes. Good use, moreover, was to be made of English and American experience; and, finally, there were, in the precise Belgian situation and in the causes that had led to the Revolution of 1830, many things to tax the critical and the constructive faculties of the national assembly. The result was not only one of the clearest and most scientific instruments of organic law ever drafted by any man or body of men, but also one of the best in point of practical fitness. The revolutionary waves of 1848 and 1870 which swept across Europe were quite without effect in Belgium, where the people were already in the enjoyment of substantial constitutional liberties. Full freedom of worship, of instruction, of the press and the theater, of assembly and association, of petition, of language,— these social rights, only partly protected under the régime hollandais, were specifically guaranteed in the constitution of 1831, together with those individual rights of perfect equality before the law, and of inviolability of domicile and property that have had more universal recognition.

Sources of the new constitution.

Successful results.

Guaranteed rights.

The nine provinces (Antwerp, Brabant, East Flanders, West Flanders, Hainaut, Liège, Limbourg, Luxembourg, and Namur), whose lines were revised by the French on the analogy of their new "departments," have each their elective assembly, known as provincial

The nine provinces.

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councils; these bodies varying in number, according to the provincial population, from forty-one in Limbourg to ninety-two in East Flanders. The assembly meets in a brief annual session at the chief town of the province, and deals with matters of purely provincial concern. Councilors are elected for four years, half of them retiring every two years. The most important work of the council is done by a standing committee of six members (*la députation permanente*), which acts as a governor's administrative council. The provincial governor corresponds to the French prefect, being appointed by the king, and having executive authority in the name of the general government. But the Belgian province has a somewhat larger measure of autonomy than the French "department." For certain judicial and electoral purposes the provinces are divided into cantons and arrondissements; but these are merely territorial circumscriptions, and have no corporate character. The essential internal divisions of Belgium are the provinces and communes. There are 2600 communes, each with its municipal government. Some of them are densely filled with an urban population, and others are mere rural townships; but each has its elected council, its burgomaster, and its échevins. The size of these municipal councils varies with the population, from nine or ten members in the smallest to thirty or more in the large places.

Provincial councils.

The governor and his functions.

The communes and the municipal governments.

Unlike the French, the Belgians have never adopted the plan of universal suffrage. The Flemish and Belgian constitution-makers of 1815 and 1830 were conservative upon this question of the franchise; and restrictions were imbedded in the fundamental law which it was almost impossible to dislodge. The constitution withstood attack until 1893, when the old system was changed in a manner which I shall pro-

The elective franchise.

ceed to explain. But it may be well first to sum up the electoral arrangements which were in existence until that time. The payment of direct taxes to the state was made the condition of voting, and the constitution provided that the sum should be determined from time to time by law, the maximum being one hundred florins, and the minimum twenty florins. At first a schedule was enacted which made different rates for town and country, and also for different provinces, the average rate being much higher than the constitutional minimum. But in 1848, under the influence of the universal wave of democratic feeling, the differences were all abolished, and the minimum of twenty florins was made the uniform qualification, by unanimous vote of both Chambers. It should be remembered that this sum (42.32 francs, equal to about $8.50) was to be paid as direct taxes to the state, and that payment of provincial and municipal taxes did not count toward electoral qualification. When in 1893 the system was changed by constitutional amendment, there were only about 130,000 voters,— one in thirteen of the adult males, or one in fifty of the population.

The system prior to 1893.

One voter for fifty people.

For a long time there was very little agitation in any quarter for an extension of the suffrage, and the system was destined to remain as it was until the intellectual emancipation of the masses had made much greater progress. Under the existing system of compulsory education the reproach of illiteracy is fast disappearing. In 1880, forty-two per cent. of the population above fifteen years of age was absolutely illiterate, while all but about twenty-nine per cent. of the children between seven and fifteen could read and write. The statistics of 1890 showed a very marked improvement, illiterates above the age of fifteen having fallen from 42 per cent. to 26.9 per cent. in a single

Decrease of illiteracy.

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decade. In deference to the demands of a growing popular intelligence, there was enacted in 1883 a law establishing an educational qualification for the provincial and communal franchise. This new law added to the electoral lists two classes of persons, irrespective of tax-paying: first, all persons exercising specified liberal professions, holders of diplomas from specified classes of institutions, occupants of important official, commercial, and social positions under specified conditions, and so on through a carefully elaborated schedule; and second, those who should pass successfully an electoral examination, the details of which were prescribed in the law.

Educational qualification for voting.

Educational qualification has been much discussed theoretically, both in Europe and America, but has had very meager practical trial anywhere. This Belgian experiment was the more interesting for that reason. The requirements were made to correspond in a general way with the amount and kind of knowledge included in the compulsory school courses, the intention being that the boy who had completed his school attendance should be well prepared, with a little reviewing, to take the electoral examination.

An instructive experiment.

The programme of obligatory instruction in Belgian schools included reading, writing, arithmetic, the legal system of weights and measures, the elements of the French, Flemish, or German language (according to the province or locality), geography, Belgian history and civil government, drawing, singing, gymnastics, and the principles of agriculture in schools of rural communes. The electoral examination embraced all these subjects except drawing, singing, gymnastics, and agriculture. As originally enacted, the law required the presentation of school certificates as a preliminary; but this demand was afterward modified. The candidate had to be fully eighteen years old.

Subjects obligatory in Belgian schools.

Subjects required for electoral examination.

(He was not, of course, to exercise the franchise until he was twenty-one.) He might have his examination in the French, Flemish, or German language, and choose between an evening and a Sunday sitting. The examinations were held in March of each year in the chief town of every canton, and the state railways carried the candidates up to the ordeal and home again at half price. The examinations were conducted by "juries of three" members each, named by the minister of the interior. Each jury was composed of a principal or leading instructor in a middle school of the state system, a like educator from a private middle school, and a third person not engaged in educational work, who acted as president. The answers were wholly in writing, and the questions to be submitted were selected by lot, in the presence of the candidates, from a very large list prepared and published by the government.

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Conduct of examination.

The current lists held good for a period of four years, and it was the privilege of the candidate to study all the questions at his leisure, in advance. Publishers issued the questions with answers annexed, to make "cramming" as easy as possible. But the examination was, nevertheless, far from being a farce. The official *questionnaire* contained one hundred numbered passages, averaging about one hundred and fifty words each, from the writings of standard authors. A number was drawn, and the corresponding passage was slowly dictated to the candidates, to test at once their ability to read, write, and spell. To answer the questions on the history of Belgium (111 in the questionnaire) required a remarkably thorough knowledge, involving also much of general European history from the time of Cæsar to the middle of the present century; while the fifty or more questions on the principles of the Belgian constitution called for know-

Question lists.

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ledge both accurate and mature. The geography questions numbered nearly two hundred, and required a minute knowledge of Belgium, a very thorough acquaintance with the natural and political features of Europe, and a fair knowledge of the whole world. One hundred and fifty problems in general arithmetic were given, and as many more dealt with measures of length, measures of surface, measures of volume and capacity, with weights, and with money. Questions from each category were successively drawn. The precautions to insure fairness were many and effective. Resident electors were allowed to be represented by witnesses, who observed that all was done in the interest of fair play. The examination papers were collected, sealed in a package, and transmitted to the examining board of some other canton, selected by lot, to be read and marked. Reading and writing together counted for ten points, and the other five branches for five points each. To pass the examination and receive a diploma it was necessary to have gained at least twenty-one points out of a possible thirty-five. The requirements seemed rather formidable; but they were open to a liberal construction, so that if the candidate were but able to write legibly, to spell respectably, to solve ordinary every-day problems in figures, and to use current weights and measures, he might fail in history and geography and still pass the ordeal. An examination system can never be free from all objections; and Belgium's had perhaps as few as any ever devised.

The system in practice.

The body of provincial and communal electors gradually became vastly larger than that of the legislative electors. Only those who paid forty-two francs of direct state taxes voted for senators and representatives. For provincial elections the limit had been reduced to twenty francs, and for the municipal fran-

Growth of the municipal voting list.

chise to ten francs,— direct taxes paid to the treasury of the state alone being reckoned. The enrolment of individuals by virtue of professions and positions (*capacitaires de droit*), and of those who passed the educational test (*capacitaires après examen*), reinforced the number of those possessing the property qualification (*censitaires*) as regards the provincial and municipal elections.

Extension of the national franchise in 1893.

In 1893, after a memorable period of agitation, the electoral clauses of the constitution were changed. For the election of members of the Chamber of Representatives, every male citizen twenty-five years old, who had been a year in the commune where he was domiciled, was given one vote. An additional or plural vote was given to married men or widowers over thirty-five years old having children, provided they paid as much as five francs a year as a house-occupancy tax. Finally, two additional votes (three altogether) were accorded to professional men and others having diplomas of higher instruction, while a plural vote was also allowed to real-estate owners. This arrangement increased the number of legislative votes almost tenfold. Qualifications for choosing senators were made the same, except that senatorial voters must be thirty years old.

Plural votes.

New provincial electorate, 1894.

A law was passed in 1894 which made the qualifications for the election of provincial councils the same as those for the election of senators. It was not until April, 1895, that the municipal and communal franchise was revised. Until that time the local electors were those above the age of twenty-one who paid direct taxes of ten francs, together with others entitled to vote under the educational qualifications. But the new law of 1895 absolutely disfranchises every man under the age of thirty. Every citizen above that age is entitled to one vote at a municipal election, pro-

Municipal suffrage law of 1895.

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Supplementary votes to fathers of families.

vided he has been a resident of the place for three years. A supplementary vote is given to family men above the age of thirty-five who are assessed a certain sum as householders. This sum is fifteen francs in places having more than ten thousand inhabitants, five francs in communes of less than two thousand, and ten francs in those having from two to ten thousand people. A second supplementary vote is granted to property owners who derive a revenue of at least one hundred and fifty francs a year from real estate.

A conservative electorate.

Thus (1) the total exclusion of men who are under thirty, and (2) the requirement of a three years' residence, practically eliminate from the Belgian municipal electorate the great majority of unmarried men and all the floating industrial element. The second vote allowed to tax-paying house-occupiers with families, and the third vote to real-estate owners, give assured control of municipal affairs to the well-to-do classes. The workingmen of the labor unions, and the large socialist element, clamored in vain for universal suffrage. The Liberal party would have preferred a more popular system, and the leaders of Liberalism were strongly committed to the principle of proportional representation in the choice of municipal councils. But the Conservative or Catholic party, which was in control of the government, insisted upon making the local suffrage more restricted than the national. With the new system, of course, educational qualification as adopted in 1883 disappeared altogether.

Universal suffrage and proportional representation rejected.

Educational test repealed.

Councils chosen on general ticket.

The municipal councils continue to be elected by the qualified voters on general tickets for terms of six years, half of the number being chosen every three years. The ward system has never commended itself to the Belgians. It happens that a majority of the propertied and intelligent classes in the large towns belong to the Liberal party, and that the restrictions

upon the franchise have always operated in favor of the very party which has advocated a more democratic system. The situation involves a curious political paradox. The Conservative position in the municipalities would be much stronger with proportional representation, which the Liberals advocate; but the Conservative majority in the national legislature insists upon the maintenance of a system in the local elections which has long kept the Conservative or Catholic Church party — despite its overwhelming influence with the masses — from controlling the municipal governments of any of the large towns. CHAP. III. A political paradox.

The Belgians have adopted a form of secret ballot that is worth attention as being better in some respects than any in use elsewhere. The ordinary French system of balloting was in vogue in Belgium prior to 1877. In that year the English system (commonly called in America the Australian system) was adopted, as a safeguard against prevalent bribery and intimidation. The English plan of ballots prepared by the authorities was found, of course, a great advance. But it did not secure absolute secrecy; for instructed or purchased voters were required, in many cases, by those who controlled them, to make the cross or mark in some prescribed and recognizable way, so that interested persons could know to a certainty whether pledges were fulfilled or not. All this was done away with by the substitution of gutta-percha stamps for pencils, in the alcoves of the polling places. The property qualification admits many illiterates to the ballot; and it is found practically objectionable to allow the president or any other official of the day to accompany such voters into the alcoves to read and explain the ticket. Different colors are used for the benefit of illiterates. Thus, in the legislative elections, the average district is entitled to choose several The Belgian balloting system. Colors for illiterates.

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members. The Catholics prepare their list of candidates, and send it in to the authorities with the signatures of at least forty electors to constitute a valid nomination. The Liberals do likewise. The parties are so perfectly organized that the occasions are extremely rare when any other than the two regular lists are sent in. The authorities print the two sets of names in parallel columns on the voting paper, printing the Catholic list in red and the Liberal list in blue. At the head of each list is printed a device which incloses a blank white patch. The voter places the inked stamp in the Catholic or in the Liberal patch at his option, folds the ticket, and deposits his vote. He may vote a mixed list, if he chooses; in which case he affixes the stamp in a space left for that purpose at the end of each name. He can vote only for names printed on the ticket, and only for as many as the number of places to be filled. Sometimes it happens that more than two tickets are nominated. In municipal elections at Brussels there have been four parties in the field,— Catholic, Liberal, Radical, and Socialist. In such cases the additional lists are printed in still different colors on the same ballot paper. The instances are exceptional where voters do not adhere to the regular and complete party list. A man votes "red" or he votes "blue," and stamps his ticket accordingly. It will be observed that the requirement of so many as forty signatures to a nomination paper helps to maintain party discipline and to keep down random voting. In all its details the system would not be perfectly applicable for a country where parties are less rigid and omnipotent than in Belgium; but the use of the stamp is an improvement which might advantageously be adopted everywhere.

Nominations.

Method of voting.

Strength of party ties.

The communal lines are sometimes much more restricted than the area of a large town. Thus Brussels

as a metropolis had 500,000 people in 1895, while the commune of Brussels — the "municipal corporation," as we should say — had hardly 200,000. The councilors in the larger communes are usually intelligent and active men — barristers, engineers, manufacturers, and progressive citizens of various callings. The burgomaster, or mayor, is appointed by the king (that is, by the government of the day) from the members of the communal council, usually in concurrence with the known or supposed wishes of the majority, and he holds his place for an indefinite term. In all but the larger communes there are two échevins, selected from the membership of the council, and having executive duties to perform as associates and assistants of the mayor. They hold for six years. In Brussels and Antwerp there are five échevins, and in the other large towns there are four. These, with the burgomaster to preside over them, form a standing executive board, and supervise municipal works, have charge of the sanitary administration as a board of health, and so on. The system is simple and efficient. The burgomaster presides at the sessions of the council as well as at those of the "echevinal college," and is at once a servant of the commune and a representative in the commune of the executive power of the state. The college of échevins has control of the civil registers of births, deaths, and marriages, and is charged with the duty of executing in the commune all the laws and mandates of the superior governments of the province and the realm, thus having general as well as merely local functions. The burgomastership becomes in some towns a sort of dynasty. In Antwerp the burgomaster of 1850 was succeeded by his son, who has in turn been succeeded by his son-in-law, thus keeping the office in the family for three generations.

Character of councilors.

Burgomasters.

The échevins.

An executive board.

Dynastic burgomasters.

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Compared with French system.

Appointing power.

Burgomaster controls police.

The march of municipal improvement.

Street reforms in Liège.

The Belgian échevins, obviously, correspond to the French adjuncts, forming with the burgomaster a standing executive committee of the same character as that which in the French municipalities is made up of the mayor and his adjuncts. But whereas in France the executive authority is conferred upon the mayor alone, who in turn distributes their tasks to his adjuncts, in Belgium much of the authority is reposed in the collective group. The French mayor exercises the appointive power, while in Belgium the municipal council itself appoints the municipal employees, as in England. The theory upon which the king names the burgomasters and échevins has regard for the fact that these officials are charged with the local execution of the general laws. Local self-government in Belgium does not in practice suffer any considerable limitation from the nominal selection of the burgomasters by the king. The burgomaster is personally charged with the police authority.

Those who regret the rapid disappearance of the quaint and old-fashioned in European cities must be shocked at the changes which a few years have made in the principal places of Belgium. Parts of these towns are now not unlike parts of Omaha, Minneapolis, or Kansas City, in their freshness and newness and in the general character of their architecture. There has been a great passion in Belgium for municipal renovation, and much has been done on lines similar to those by which New and Corporation streets were constructed in Birmingham. In about 1875, the Belgian law regarding ex-appropriation was altered to permit such improvements. The town of Liège, for example, bought up all the houses — old and poor, for the most part — lining a narrow but central and important street. The houses were demolished and the street was greatly widened. The building sites were

then sold in toto to a company for an amount more than sufficient to cover the cost of original purchase and of demolition. The company built in part and sold lots in part, and the result is a magnificent modern street, now solidly built up. The beautiful broad boulevard, with double rows of splendid trees, that curves through Liège, was once the course of the Meuse (or rather of one branch, the original town being upon an island). But the river was diverted into a straighter channel some seventy years ago, and a grand street was made of the other and longer channel. About 1879, a smaller island, then unbuilt upon, was acquired by the government, and sold to the municipality of Liège for 1,000,000 francs. The town authorities laid out fine streets and sold building sites. Within two years the new "addition" was splendidly built up with showy residence rows. The city's speculation was a very lucrative one.

A municipal speculation.

But these things are not always carried out so smoothly. Visitors to Brussels must have been impressed with the broad and exceedingly handsome new business thoroughfare on which the Grand Hotel stands. These "inner boulevards" were made a few years ago, upon the plan already described. The old buildings were all purchased and demolished at great cost, and the formerly narrow street was made straight and broad. The reconstruction was accomplished by a foreign company, which could not meet its obligations to the city, and failed. A large amount of the property fell into the hands of the municipal corporation, which became a landlord on an extensive scale, and which, as perhaps many of the subsequent guests did not know, owned the Grand Hotel itself. Antwerp has employed this same plan to rebuild and improve its central streets; and so the old and picturesque is disappearing, and something like Parisian

Brussels and the "inner boulevards."

Antwerp's street reforms.

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uniformity and universality is everywhere the new rule in municipal architecture.

Brussels, as a modern municipality and a growing commercial center, has many points of interest. It is developing rapidly, and its ambition and courage are expanding in due proportion. It is one of the few large towns of Belgium or France that have gone into the business of gas supply on municipal account. Its gas-works are advantageously operated, prices have been reduced, and the net revenues are considerable. The tram-lines in all the Belgian towns are operated by private companies under strict regulations, and they pay mileage rates to the municipal treasuries for use of the streets. They are, as a rule, admirably managed, with low fares, graduated according to distance. Marked improvements are everywhere being made in such matters as paving, drainage, building regulations, and municipal amenities of various sorts; but in these undertakings the Belgian towns, like the French, are more conservative than the German and the British. Brussels has taken the notable example of Glasgow, and the still more recent example of Manchester, to heart, and is seriously agitating the question of a ship canal. This huge undertaking could not fail to enhance the importance of the Belgian capital, and, as a financial project, it seems entirely feasible. Every ambitious modern city has its future largely in its own hands, and Brussels is intent upon making itself great.

Brussels and its gas plant.

Tram-lines in Belgium.

General improvements.

A projected ship canal.

Meanwhile, immense sums have been expended at Antwerp for the improvement of harbor facilities, and few seaport municipalities in Europe have since 1880 exhibited a more determined or intelligent energy. Antwerp, like Brussels, is gaining population with striking rapidity. It had 120,000 people in 1862, and more than 260,000 in 1895. Brussels in 1800 had

Antwerp's harbor facilities.

Growth of Belgian cities.

66,000 people within the walls (which are now demolished and replaced by encircling boulevards), and there were 10,000 more in the extra-mural precincts. The total population in 1893 had reached 500,000, of which perhaps 200,000 were within the limits of the ancient commune or inner city. Liège, in 1893, had 160,000 people, as against 100,000 some thirty years earlier.

Housing of the people.

Although these Belgian cities are growing so handsome and Paris-like, one regrets to find the housing of the poor so inadequate. The late M. de Lavelaye, of Liège, once assured me that while, in recent years, much new construction had added greatly to the average size and comfort of the houses occupied by the more fortunate classes, there had been little or no new building for the poor, and small improvement in the character of their habitations. As in the British cities, so in the Belgian towns, thousands of families live each in a single room. The condition of the *ouvriers* did not seem to M. de Lavelaye to be improving fast. It was in this vein that the Belgian economist discoursed as we inspected the handsome new rows in Liège consisting of houses that cost about one hundred thousand francs to build, on lots valued at 20,000 francs — such establishments renting for about five thousand francs. Incidentally, it may be said that many well-to-do people — perhaps nearly half of them — in Belgian towns own their houses.

Sanitary progress.

But while the poor are still overcrowded, and housing-reforms require serious attention, the general conditions of the Belgian cities have improved astonishingly through the successful adoption of modern sanitary methods. Thus the death-rate of Brussels in 1876 was nearly twenty-five per 1000, from which there was a gradual decline until for the year 1894 the rate was 18.1. In the face of an exceedingly rapid

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Reduced death-rates.

growth, the death-rate had fallen off about thirty per cent. The Antwerp death-rate had formerly been a high one, but in 1894 it was a little less than nineteen. Such figures speak eloquently of good municipal housekeeping — that is to say, of satisfactory water and drainage, public cleansing, food inspection, and vigilance against infectious diseases.

Octroi abolished.

So many things in the local administration of Belgium being like those of France, it is worth while to observe one great point of improvement. Belgium abolished the octroi taxes before 1870 with the result of making some of the commonest articles much cheaper in Belgian than in French towns. One is impressed, indeed, with the cheapness of all small articles in Belgium. In France the smallest coin in usual circulation is the sou piece (five centimes, equivalent to one American cent, or an English half-penny); but in Belgium copper coins of one and two centimes are in ordinary use. A newspaper may be bought for two centimes. The tram-line fares are six or eight centimes per kilometer. School-children buy pencils and other small articles at prices which only the small coins make possible. The relation of minor coinage to customary prices is worthy of more study than it has received. The poor people of Belgium probably save in the total a large sum annually because of the fact that change can be made to the centime.

Cheapness of tramway fares and small articles.

Freedom of communication.

The substitution of other sources of local income for the octroi dues has been accounted an economic reform of great social benefit. In so small a country, where population is so dense and where good roads and navigable waterways invite to easy traffic, the octroi system could but cause great friction. Belgium's comparative freedom from the strain of military expenditure has made it possible for the central

government so to adjust the taxation system as not only to permit but to require the towns to abolish their local customs barriers.

The educational methods of the Belgian towns are in most respects like those of France. The schools, under the Belgian system, are directly controlled by the municipal council, which appoints the teachers and performs the functions of a school-board. The hospital administration, the bureaux de bienfaisance, and the monts-de-piété, are also under the authority of the municipal council, which appoints their supervising boards and manages their finances. Thus the municipal councils of Belgium occupy a larger sphere of control than those of France, or even those of England. For the British schools and poor-relief are administered by separate elective bodies, while in France they are in the hands of appointive boards. In Belgium, on the contrary, these great branches of local administration, like all others, find their management vested in the one representative municipal council. The provincial government exercises a considerable measure of supervision over the actions of the municipalities and communes, not to the end of checking or restraining a proper municipal freedom, but for the sake of regularity and safety. Decentralization has been better realized in Belgium than in France, although the manner in which the superior control over local government is exercised is similar in the two countries.

Municipal councils control schools.

Also charities, etc.

Control exercised by provincial authorities.

The effect of modern conditions upon the growth and the grouping of population may be studied in Holland to great advantage. Perhaps nowhere else has the rapid expansion of the towns been attended with so few embarrassing results. The larger its membership becomes, the more orderly and efficient

Town population in Holland.

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seems to be the Netherlander hive. For some years past, using round figures, there have been 150,000 births each year in Holland, and 90,000 deaths, leaving a net annual increase of 60,000. Emigration has averaged less than 5000 a year, and it has been counter-balanced by some immigration. Thus for the four years from the end of 1889 to the beginning of 1894 the average net gain of population was 55,374 per annum. In the twenty four years previous to January 1, 1894, Holland's population had grown from 3,579,529 to 4,732,911,—a gain of 1,153,382, or more than 32 per cent. Of this remarkable increase, 602,036 people are credited to the twenty-one largest towns, and 551,346 represent the gains of all the rest of the country. The percentage of the total population belonging to the large towns (those having more than 20,000 people each) had increased from 26.1 to 32.5. But the urban growth in fact was greater than these figures indicate; for much of the gain outside the large towns was aggregated in manufacturing suburbs, and in industrial towns having from 10,000 to 20,000 inhabitants. The density of the provinces of North Holland and South Holland had increased to the remarkable averages of 876 and 836.5 per square mile; while for all Holland the average was 374.

Remarkable recent growth.

With a harsh and capricious climate, and with great difficulties in the way of thorough drainage and a satisfactory supply of water, it is nothing short of a brilliant triumph of sanitary science and enlightened municipal administration that Holland is able to accommodate half a million additional inhabitants every decade, without further aggravating any of the evil consequences of overcrowding, but, on the contrary, with steady improvement in the average of healthfulness and of social well-being. The death-rate dimin-

Density and social progress.

ishes; poverty and crime are well controlled; education becomes more universal and more complete, and, in short, the urbanization of Holland seems not to have been attended with any of those phenomena of physical, mental, or moral decline that have been regarded in many quarters as inevitable results of the growth of cities. For the whole country, the average yearly death-rate in the decade 1860–70 was approximately 25 per 1000. In the period from 1870 to 1880 it declined somewhat. But from 1880 to 1890 it fell materially, and reached an average of about 20. In 1893 it was only 19.1. But the great city of Amsterdam, with a population (December 31, 1893) of 446,657 not including the suburbs, reported for 1893 a death-rate of only 18.6, which was appreciably less than the rate for the whole of Holland. When a country's chief city has a death-rate lower than the rate for the nation,—in the face of the old maxim that death-rates increase in a certain mathematical ratio as density increases,—then, surely, modern sanitary improvements and administrative methods are vindicated beyond all controversy. To show that the low Amsterdam rate promises permanence, it should be said that the report for 1894 was still more favorable, the figures being 18.3. At the Hague in 1893 the rate was 19.1,—exactly the same as that for the whole country; but in 1894 the Hague rate dropped to 16.9. The Rotterdam rate was 21.9 in 1893 and 20.1 in 1894. Until a very recent date, mortality in these cities was at a considerably higher rate than in the nation at large. Birth-rates for 1894 were reported as follows: Amsterdam, 31.6; Rotterdam, 35.3; the Hague, 31.4. The birth-rates promise soon to be double the death-rates.

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Reduction of death-rate.

Amsterdam's brilliant record.

The Hague and Rotterdam.

The population of the seven largest towns at the opening of 1894, as compared with their population

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ten years earlier and thirty-two years earlier, is shown in the following table:

Town growth in 32 years.

| | *Jan.* 1, 1894. | *Jan.* 1, 1884. | *Jan.* 1, 1862. |
|---|---|---|---|
| Amsterdam | 446,657 | 361,326 | 268,355 |
| Rotterdam | 228,597 | 166,002 | 109,402 |
| The Hague | 174,790 | 131,417 | 81,393 |
| Utrecht | 91,070 | 74,364 | 54,495 |
| Gronengen | 58,554 | 49,992 | 36,112 |
| Haarlem | 56,803 | 43,961 | 28,145 |
| Arnhem | 52,582 | 44,436 | 26,382 |

Within one generation these Dutch towns have nearly or quite doubled their population. If an area large enough to include the contiguous suburbs were brought into the comparison, it would be seen that the population of Amsterdam as well as that of the other towns in the list had, within a third of a century, gained more than a hundred per cent. The activities that this rapid growth has necessitated on the part of the municipal governments may readily be inferred. But the new problems have been met with intelligence and success.

Doubled in one generation.

The last generation of Dutch town-dwellers were habitually economical in the domestic use of water. For although canals are everywhere, and almost the whole country would seem in imminent danger of submersion through the breaking of dykes, it is needless to explain that the canal water is not potable. In the earlier days, drainage of every character passed freely into the water-ways, and the series of Amsterdam canals, for instance, were in fact so many open sewers. But methods have changed. The canals are flushed and renewed with clean ocean water, introduced from the North Sea by an artificial channel, and the sediment is constantly being dredged. The houses are supplied with earth closets, from which accumulations are regularly and frequently removed in tight receptacles on the well-known tub or pan

Old and new sanitary appointments.

system; and the excrementary material is converted into fertilizers. The Amsterdam drinking-water supply is introduced from the famous "Dunes," near Haarlem, by aqueducts; and with this improved supply of pure domestic water collected from the sterile region of sand hills; with the better disposition of waste of all kinds; and with the improved means for renewing water in the street canals which divide Amsterdam into nearly a hundred islands,—the fevers and the other once prevalent diseases have become far less frequent, so that a city which seemed destined always to be unwholesome has now become a marvelously healthful place. The Rotterdam water-supply is pumped from the river and filtered, while waste materials are carried to the farms as from Amsterdam. I am informed that the Amsterdam municipality has recently acquired control of the gas plant and is furnishing its citizens with their lighting supplies. But if this be the case it is an exceptional instance; for the Dutch towns in general have been little disposed to embark in these collective municipal undertakings. Private capital and energy have always been abundant in Holland, and have been allowed as a rule to take the initiative in supplying such common wants as light and transit. The street railways are numerous in the towns, and the country is intersected with steam tram lines. Fares are exceedingly low, and the facilities for local transit and traffic are notably good. The Amsterdam municipality has achieved great things in the development of harbor accommodations, and the canal works, bridges, and municipal appointments in general, are undergoing constant improvement at the hands of skilful engineers.

Water-supplies.

Lighting and transit in private hands.

Public works of Amsterdam.

In 1795 the aggressive French republic made an easy conquest of Holland. As in Belgium, the

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The French régime in Holland.

"rights of man" were proclaimed, and the new French methods of administration were promptly acquired by the "Batavian Republic." The Napoleonic modifications were in turn applied to the Netherlands, and in 1810 Napoleon went so far as to incorporate the country with France, its institutions being completely assimilated. With the battle of Waterloo the French domination came to an end; but nearly twenty years of modern French administrative organization, with French civil and criminal codes, had left an impression not to be obliterated. When therefore the kingdom of the Low Countries, uniting Holland and Belgium, was formed in 1815, it rested upon the basis of a written constitution which guaranteed the essential principles of the French revolution of 1789, and which prescribed a framework of provincial and municipal institutions upon the familiar French model. Subsequent enactments have created numerous variations of detail; but the French, Belgian, and Dutch systems of local administration are all traceable to a common origin. From 1795 to 1815 they were practically uniform. In 1830 the Belgians withdrew from the Union with Holland, and adopted a new constitution. Their minor organization, however, continued to be very similar to that of their greatly respected Dutch neighbors. The Dutch constitution was revised and somewhat liberalized in 1848, with a new and comprehensive municipal code following two or three years later. Again in 1887 the constitution was revised, the franchise broadened, and some changes of detail adopted in the administrative laws.

Permanent results.

Dutch constitutions.

Administrative system.

The outline of the system of provincial and municipal government may easily be drawn, and the reader of these pages will at once perceive its similarity to the French system, and still more to the Belgian.

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The Dutch provinces (corresponding to the French departments and the Belgian provinces) are eleven in number, and the communes (in 1894) are 1123. Each province has its elected council, known as the "Provincial States," corresponding precisely to the councils-general of the French departments and the provincial councils of Belgium. These bodies vary in size from 80 in the most populous (South Holland) to 35 in the least populous (Drenthe) of the provinces. They hold two sessions a year. They are represented for every-day administrative purposes by a standing committee of six of their members, designated by the body itself. This executive committee is known as the "Deputed States," and it holds the same place in provincial affairs as the *députation permanente* of the Belgian provincial councils, which also consists of six members. The standing executive committee of the French councils-general, as created by the law of 1871, occupies a like position. In Holland an appointed "Commissioner of the Sovereign" represents the central authority in each province,—corresponding to the provincial governor in Belgium and the prefect in France. The commissioner presides over the sessions of the Provincial States, and also over those of the executive committee of six, i. e., the Deputed States, where in case of an equal division he casts the deciding vote. While many of his duties are identical with those of a French prefect, he exercises a less dominant authority. Provincial and municipal self-rule in the Netherlands is more complete than in France. The Deputed States of each province must approve the budget of all municipalities, and must always give consent before municipal property can be alienated. Franchises, important contracts, and some other municipal matters must also be referred to the provincial authorities for ratification. But in most of their

Provincial organization.

The Royal Commissioner.

Relation of province to municipality.

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ordinary affairs the communes are left to themselves, their functions being regulated by the terms of the general law.

Municipal councils.

The municipal councils of all cities and towns of considerable size are composed of thirty-nine members, elected for six years, thirteen retiring every two years. For smaller communes the number is less, and the smallest elect only seven councilors. The rule for all communes, however, is the six-year term and the biennial renewal of one third of the council. The suffrage in Holland is much restricted by tax-paying qualifications. Previous to 1887 the requirements were so arduous that there were only three voters for every hundred people. At present there is one voter for about fifteen people — a total electorate of approximately 300,000. Voters must be twenty-three years of age, and must have paid a land tax of at least ten guilders (about $4.00), or direct personal taxes of an amount varying in different towns according to population.[1] So exclusive an electorate might confidently be expected to choose substantial burghers as municipal councilors. Any citizen who is twenty-three years old is eligible to a seat in the council, whether he is entitled to vote or not. But an electoral body of tax-payers would naturally fill the council with men of their own class. The mayor, or burgomaster, as he is usually called, is appointed by the sovereign, for a term of six years. The appointment is presumably made in deference to the expressed or understood wishes of the municipal council. The mayor presides over the council, and he has

Suffrage limitations.

Character of councilors.

The burgomaster.

[1] Pending propositions, advocated by the government itself in the legislative chambers, will, if adopted, as seems probable, fix the minimum age of voters at twenty-five, and greatly reduce the qualifications, so that, it is estimated, there will be 700,000 voters — more than twice the present number.

the power to suspend its ordinances and resolutions for a period of thirty days, in order to allow the deputed states of the province time to act as a court of appeal and settle the matter. The councils of large towns select from their number four *wethouders*, who constitute an executive committee with the mayor as their presiding officer. In the smaller towns only two or three such wethouders are chosen. They correspond to the échevins of the Belgian councils, and to the adjuncts of the French, though possessing higher authority than their French equivalents. They are in general charge of all the departments of municipal administration, and exercise the appointing and removing power over the municipal officials. The police, however, are under the mayor's personal control, by virtue of his character as an officer of the State.

The "wethouders."

Appointing power.

Police control.

The Dutch burgomaster, though belonging to a municipal system the forms of which are so much more closely akin to the French than to the German, is in practice an official more similar in status to the German burgomaster than to the French mayor. His six-year appointment is likely to be renewed from time to time, and he is a high and expert professional civil servant, rather than a citizen magistrate invested with brief authority. The Amsterdam burgomaster being appointed not long ago to a cabinet position, the vacancy was filled by the transfer of the Rotterdam burgomaster to the executive chair of the greater city. More commonly, however, the burgomaster has local affiliations with the town where he holds office, and vacant burgomasterships are often filled by the promotion of a wethouder or member of the council's executive committee. Practically, a burgomastership in the Low Countries is a life position, and it carries with it much dignity and

Position of the Dutch burgomasters.

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honor, not to mention the very adequate compensation that is allowed. Ordinary councilors, of course, are not paid, while wethouders are granted reasonable salaries.

Payment of salaries.

Reliance on private agencies.

The Dutch preference for private initiative is exhibited in the school system, and also in the methods of charitable relief. While education is very general and thorough, it is not the policy of the country to develop a uniform, free, compulsory system of elementary instruction. Private schools are subsidized by the municipalities, and public schools are not wholly free. The system resembles that of Great Britain in many respects. The report for 1892–93 showed that 466,910 pupils were enrolled in 2993 public elementary schools, and 205,378 in 1331 private schools. The infant schools (kindergartens) are chiefly in private hands, the report showing 80,517 children in 2550 private infant schools, and 23,858 in 800 public schools. The general government pays a portion of the expense of instruction, and in 1892 it appropriated nearly $2,500,000 on account of primary education, while the local authorities expended more than $3,500,000. There is no such thing in Holland as the levy of a poor rate, and the presumption is that private societies will meet the demands of charity. The communes grant small subsidies to the benevolent societies and establishments, and suppress mendicancy as criminal. To some extent there are public work-houses, but the State, the provinces, and the communes merely provide such means and establishments as are found necessary to supplement private charitable effort.

Elementary education.

Charity and relief.

Certainly it is not to Spain that the inquirer would be sent for practical lessons in the art of municipal administration. Yet Spain, with all its backwardness in the general adoption of modern ideas and facilities,

should not be wholly overlooked even in a survey of the most recent phases of progress in Continental cities. From the standpoint of theoretical organization, the Spanish legislators and administrative lawyers of the Liberal party have shown an almost unsurpassed ability and knowledge; and they have given their country an administrative system — at least on paper — which is perhaps the most perfectly adjusted of any to be found in Europe. Moreover, at points where the magic of modern commercial progress has touched a Spanish community, notably at Barcelona, one perceives that the people possess capacity for municipal self-government, and have begun to transform their public services, revise their street systems, and modernize their municipal establishments with as great an energy as can be observed anywhere else in Europe, and with ready acceptance of the most advanced methods.

Spain's model administrative statutes.

As to practical progress.

Spain's relations with the first French Republic — which resembled vassalage rather than a free and equal alliance — did not much affect the domestic régime of political and ecclesiastical absolutism and the medieval methods of administration. But Napoleon, in 1808, assumed the sovereigu authority, made his brother Joseph the nominal king, and promulgated a constitution of the clear-cut, regular sort which was operative in France. Uniformity of system was introduced, with complete centralization. The Spaniards were rebellious, however, and in 1813 they expelled the French. The revolutionary leaders had, meanwhile, in 1812, framed a liberal constitution at Cadiz, based upon the French principles of 1789, and providing for individual freedom and a large measure of local autonomy. The advanced and enlightened minority of the Spanish people were ready for the modern order of things. But the ignorant masses had not

Napoleon in Spain.

Constitution of 1812.

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been permeated by the new influences; and with the return of a Bourbon monarch the constitution of 1812 was set aside, and the ancien régime was restored, with its hideous accompaniments of inquisitorial persecution. Nevertheless, the constitution of Cadiz held its place as an ideal in the minds of liberal and educated men; and in 1836 it was restored for a little while by virtue of a successful revolution. In 1837 the Cortes framed an excellent constitution which was similar in most respects to the Belgian constitution of 1831, and which also bore a resemblance to the French constitution of 1830 under which Louis Philippe was called to reign. The system of provinces and communes,— with prefects and mayors for executive purposes, and with provincial and municipal councils for deliberation, with a hierarchy of control, and with a careful assignment of local jurisdiction,— was now firmly established in Spain. But a reactionary movement in 1845 diminished the extent of local freedom, while also maintaining heavy restrictions upon the elective franchise.

Reforms of 1837.

The revolution of 1868 again restored the progressives to power, and it was followed by sweeping legislative reforms. The constitution of 1869 was framed by the national legislature after the most protracted and careful deliberation, involving a comparative study of all the constitutional projects and experiments of the century, whether European or American. The Spanish documents of 1812 and 1836 naturally formed the basis for the new organic law. Individual liberties were guaranteed, the suffrage was extended to every male citizen who had attained the age of twenty-five, and self-government for provinces and for municipalities took the place of centralization. It was the most advanced of all the European constitutions then in operation. The contrast was the more em-

Constitution of 1869.

A triumph of liberal views.

phatic because the highly centralized system of the Second Empire was still the law of France. To this free constitution the Italian Prince Amadeus,—called by Spanish liberals from the fresh atmosphere of reform and progress in Italy,—took the oath of allegiance when he ascended the throne of Spain in 1870. Three years later he abdicated, and the republic was proclaimed, with institutions much more completely divested of monarchical traditions than those which the new French republic had ordained. But within a year a scion of the Bourbons was reigning, and after the suppression of the Carlists, and the necessity of a return from the military to the civil order of government, a new constitution, that of 1876, was drawn up by the ministers themselves and submitted for ratification to an elected national assembly. It has remained the organic law of Spain since its proclamation on June 30, 1876. It was a less advanced instrument in many respects than the famous one of 1869; but, nevertheless, it was doubtless better adapted to the actual conditions prevailing in the Spanish nation. It restricted the suffrage, whether for local or for national elections, to citizens above the age of twenty-five who had paid a land tax, or an industrial tax, amounting to about five dollars per annum; although the priests and members of learned professions, and various classes of public servants and others presumably instructed and intelligent, were entitled to be registered without regard to the payment of taxes. Under these qualifications the registered voters were about three in number for every fifty persons. It must be remembered that the universal suffrage of 1869, as of the transient liberal constitutions of earlier periods, had not been demanded or appreciated by the masses. In June, 1890, however, the tax-paying restrictions were abolished, and the voting lists now contain the

Short-lived republic.

Present organic law.

The elective franchise.

Extensions of 1890.

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names of all male citizens above the age of twenty-five who have been identified with a particular commune for two years.

The constitution of 1876 did not materially affect the admirable system of municipal and provincial organization which had been devised as one of the chief reforms resulting from the revolution of 1868. There are in Spain about 9400 municipal districts or communes, and 49 provinces. The marked characteristic of the Spanish system is the unreserved and emphatic manner in which it proclaims and guards the sovereignty of the communes and provinces within the spheres of action that are ascribed to them. The general lines of the whole administrative organization are the familiar French lines; but a much firmer stress is laid upon local autonomy. Here again, however, it is well to remember the difference between institutions that have taken deep root and those that exist on paper. In Barcelona municipal autonomy is a realized fact; but in many Spanish communes it is far less operative as a working system than in the French communes, where the average intelligence and political experience of the people are so much more highly developed.

Local self-government.

The Spanish provinces.

The Spanish province is precisely analogous to the French department. Its affairs are managed by a representative body consisting of 25 deputies for provinces having less than 150,000 people, the number increasing according to a graduated scale up to 40 for those of 300,000, and to 48 for those of 500,000, with one additional deputy for every 50,000 persons in excess of half a million. The largest provinces actually have about 52 members in their legislative assemblies. As in France, Belgium, and Holland, this provincial congress appoints a standing executive committee from its membership, which exercises con-

stant administrative authority over provincial affairs. These affairs consist of all public matters distinctively affecting the province, and include particularly such interests as roads and water-ways, penal and charitable institutions, and education. The national authority is represented in each province by a "civil governor" — a functionary identical with the French prefect — whose duty it is to see that the national laws are enforced, and that the provinces and municipalities confine themselves strictly within the limits of their own jurisdiction. The governor presides over the annual sessions of the *diputation provincial* (the provincial assembly) and also over the *comission provincial* (the standing executive committee). He may suspend a decision either of the assembly or of the committee, in order to refer it to the central Council of State. This reference is merely to determine whether or not the provincial authorities have ventured beyond their lawful power. The governor has also to represent the State as a supervisor within the province of such national matters as posts, telegraphs, and other industrial and economic concerns relating to the public revenues and to the political and social order.

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The "civil governor."

Each commune, by the suffrage of the registered male citizens above the age of 25 who have been domiciled in the place for two years, elects a municipal council *(ayuntamiento)* for four years, one half of which retires every two years. Election is by general ticket, and the number of councilors (called *regidores* or *concejales*) varies from five in the small country communes to thirty-nine in the largest towns. The entire municipal authority is vested in this council. It proceeds to designate one of its own members as *alcalde* (a term equivalent to mayor), who presides over the body and is the chief executive officer of the commune. In the larger towns the alcade is assisted

Election of municipal councils.

The alcalde and his executive assistants.

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by several *tenientes alcaldes*, who form an administrative corps altogether analogous to the mayor's adjuncts in a French municipal government. The provincial authorities do not hold the municipalities in tutelage, but they exercise an oversight aimed to keep the communes from exceeding their powers or committing irregularities. Thus the system as a whole is a finely balanced one, and is very creditable to the scientific attainments of the Spanish publicists and law-makers.

Completeness of municipal authority.

The municipal councils exercise a very complete range of local authority. The minor courts of justice are municipal tribunals, and came under the jurisdiction of the councils. The municipal justices of the peace have charge for the State of the registers of births and deaths, and perform the civil ceremony of marriage. They also act as courts of conciliation in disputes of all kinds. Private, ecclesiastical, and endowed charity in Spain occupies a more important place than public charitable administration. But the municipal councils are in full control of a large amount of charitable work, and supervise the accounts of private hospitals and institutions. General supervision is also exercised by the national and provincial authorities, the secular system gradually superseding the traditional religious establishments. Primary instruction is one of the chief concerns of the municipal councils, the general law requiring the universal

School system.

maintenance of schools, and making it obligatory upon every alcalde to see that all children in the commune are enjoying either public or private instruction. But while the school system has been greatly improved in recent years, the compulsory universal education, on a uniform plan, as ordained by law in 1857, has never been well enforced. Soon after the enactment of that law, only twenty per cent.

of the population could read and write. This proportion has increased to perhaps thirty per cent. Efficient self-government must await a higher average degree of intelligence.

Sanitary condition.

The present sanitary state of Spanish towns helps us to understand the conditions that prevailed elsewhere in Europe half a century ago. Reforms, it is true, have been instituted in some of the more progressive cities, but the high death rates and the prevalence of preventable diseases point unerringly to the general neglect of scientific means for the protection of the public health. The average death rate for all Spain has for several decades been approximately 30 per 1000, while the rate for the large towns has been considerably higher. In Barcelona, however, the rate for 1894 did not exceed twenty-nine; and the Madrid rate, which in the seventies was wont to approach forty, has of late been nearer thirty. This means, in the case of both towns, that water-supply, drainage, public cleansing, and kindred agencies affecting health, have been made somewhat more satisfactory, and that the measures used for controlling epidemic maladies are greatly improved. In Portugal, which has made still less progress than Spain in modern methods, the mortality rates are higher,— at Lisbon, for example, the 1894 rate being 36, while at Oporto the rate was 45.5.

High death-rates.

Compared with Portugal.

Growth of Spanish towns.

The population of Spanish towns as a rule has not grown very rapidly of late, although the two largest ones, Madrid and Barcelona, are exceptions. The census of 1877 reported 397,690 as the population of Madrid, while that of 1887 enumerated 470,283, and the number for 1894 was estimated at 510,000. Barcelona is very conspicuous among the examples of recent European municipal expansion. In 1877 it had 249,106 people, and the number was 272,481 in

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1887, while in 1894 the estimate was 430,000. It is expected that the twenty years from 1877 to 1897 will show a doubling of Barcelona's population. This rapid growth, moreover, has been attended by ambitious projects for the aggrandizement of the town, and no city anywhere has a more uncompromisingly modern aspect in its new quarters. The harbor of Barcelona is wholly artificial, and its creation and improvement form a signal instance of municipal energy. The water-supply is of excellent character and has recently been introduced from neighboring mountain sources. Madrid, which is also showing activity in the creation of modern suburbs, derives water from the Lozoya, by an aqueduct thirty-two miles long. Other Spanish towns, Valencia, Malaga, and even Seville, in some regards show signs of awakening and progress under the common impetus of the age; but for our purposes they are instructive chiefly for the contrasts they supply when brought into comparison with the most advanced communities of other countries.

Aggrandizement of Barcelona.

Water-supplies.

Other Spanish towns.

## CHAPTER IV

## RECENT PROGRESS OF ITALIAN CITIES

REGARDED as modern municipalities the Italian cities had not until a very recent date enjoyed a good reputation. Some of them, at least, had been notorious for the overcrowding, in garrets and in reeking sub-ground residences, of their shoals of ill-conditioned, unemployed plebeians; for the frequency of epidemics and the lack of efficient sanitary administration; for their foul and narrow passages and the bad odors that indicated the lack of systematic scavenging,—and in short for an almost complete dearth of enterprise in the direction of modern municipal arrangements and undertakings. To what extent this reputation was deserved we need not inquire very carefully. Perhaps the almost crushing splendors of Roman and Italian history, and the imposing character of much that remains to us of the old art and architecture, have by contrast deepened the unfavorable impression that contemporary conditions of life in Italian cities have evidently made upon the minds of visitors in general. If the simple facts were to be compared impartially, it would certainly appear that in the large English and Scotch towns previous to 1870 the squalor, overcrowding, bad sanitation, and general inadequacy of municipal appointments were almost as prevalent as in those of Italy. And the Italian cities, moreover, might well have urged, in extenua-

Modern aspects of Italian cities.

An effect of contrast.

Compared with British towns.

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tion of their plight, the facts of decline in relative wealth and importance, of commercial and industrial stagnation, and of protracted political adversities; while the British towns were growing in wealth and numbers, and might with wisdom and forethought have made their public arrangements keep pace with the advance of commercial prosperity. But whatever the extenuating circumstances, the fact remained that the Italian cities were in a condition which the sanitary scientists and the municipal reformers could but deplore. The British and German as well as the French cities had at length undertaken notable reforms in their physical appearances and conditions — widening streets, demolishing unwholesome buildings, constructing improved drainage systems, and providing in various new ways for the social well-being; and when the visitor who had observed these matters attentively went to Italy, it was true that he found reform more tardy, or at least more superficial.

Tardiness in sanitary reform.

I am aware that to some people it seems a sacrilege to discourse of the common-school system, the new building regulations, the drainage and the ward politics of immortal Rome. I remember the rude shock that I once gave to the sensibilities of some very intelligent travelers at the dinner-table of a Roman pension by the innocent remark that I had spent the day not in the galleries or churches but in watching the repaving of a street and the construction of the main sewer tunnel of a rapidly-building new residence neighborhood, and in admiring the splendid new retaining walls and bridges of the Tiber. But certainly the people now living are entitled to some consideration; and the nearly half a million residents of Rome cannot be expected to live wholly upon their pleasure in medieval art, or their pride in archeological remains. It is inevitable that they should think it

Claims of the present-day population.

their right and duty to make Rome as modern a city as possible, so far as its health, comfort, and advantages for residence and business are concerned.

As to charges of vandalism.

Fortunately, the more recent European improvements have nowhere been made in the spirit of vandalism. It has been alleged that the Coliseum was plundered and ruined to build St. Peter's and the Vatican; and the churches and palaces of papal Rome were in very large part built with materials torn from the noble temples and stately monuments of Roman Rome. But it belongs to the new spirit of improvement to preserve and properly guard everything of real archeological value; so that the modernization of Rome, by men who believe that their city has a living future as well as an historic past, strives to obliterate no worthy monument of antiquity, but on the contrary has not spared pains or cost to discover, preserve, and render instructive and intelligible all that has escaped the vandalism of the intervening centuries. And so I must plead guilty to sympathy with much that is proposed for freshening and renovating this ancient capital of the world, and for making it a fit place for its people to live in. The Capitoline Hill has its much-frequented museum of antiquities, and its thrilling memories of a glorious past; but it is also the seat of a modern municipal government that is making bold endeavors for the present and large plans for the future of the city. The bureau of municipal statistics ought not to be deemed the least interesting thing on this historic hill; for its weekly bulletins *demografico-meteorico*, recording births, marriages, deaths, and the meteorological phenomena of the week, all according to the most approved comparative methods, are reminders that Rome still lives. As for the visitors who have been wont to find "picturesqueness" at Naples in

Preservation of antiquities.

Municipal offices on the Capitoline.

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Italy's new municipal code.

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Membership of councils.

Giuntas and sindacos.

The communal franchise differs in Italy from the general or parliamentary franchise. By the law of 1882 the parliamentary electoral lists include persons who, after meeting the indispensable preliminary

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conditions of being male citizens fully twenty-one years old who can read and write, are either tax-payers to the amount of about four dollars a year, or else are inscribed by virtue of two years' army service, or of holding certain positions—official, educational, or professional—specified in the law. The general lists thus made up include one person in eleven or twelve of the population. For the communal franchise the general electoral lists hold good, but they are extended to include smaller tax-payers, and also to include occupiers of premises having a rental value that is graduated according to the population of the commune. Thus, in communes having 150,000 people, the limit of rental value is fixed at forty dollars a year, and it is diminished to one tenth of that amount in communes which have less than 1000 people. The really effective disqualification is that of illiteracy. No amount of tax-paying can procure the franchise for the man who is unable to read and write. On the other hand, there are few literate citizens who cannot be enrolled by virtue of tax-payments, of house occupancy, or of two years' army service. Fully sixty per cent. of the adult population of Italy is illiterate; and of male citizens of voting age at least fifty per cent. belong to that category. The other requirements can therefore have had comparatively little effect in restricting a franchise which admits to the electoral rolls the names of more than one twelfth of the total population. This absolute educational restriction has existed hitherto in no other European country; but its reasonableness is hardly to be disputed. If it had been adopted in France by the founders of the present republic the advantage would have become evident. It is enough here, however, to say that the electoral bodies in the Italian communes include practically all the men who can read and write.

Illiteracy an absolute disqualification.

Other restrictions not important.

An illiterate father has the right to delegate to his literate son his tax-paying qualification, and in this and several other ways family representation is often secured at the polls through the delegation of the property rights of wives or parents.

Delegation of property rights.

Municipal councilors are chosen for five years, and one fifth of the body is renewed annually, the vacancies being filled upon general ticket (*scrutin de liste*) by all the voters. In communes of more than ten thousand inhabitants the law provides that the elector shall vote for only four fifths as many names as there are councilors to be elected. Fractions are counted as integers, and thus, for example, in a city having a council of sixty members and filling twelve places annually, the individual elector would be entitled to vote for a list of ten. This device for the benefit of minorities is not without merit. It should be added, however, that in the case of the large communes the law permits division into *frazione*, or wards, with apportionment of representation in the council.

The general ticket plan.

A device for minorities.

The full council is a deliberative rather than an administrative body, and it has only two "ordinary" sessions in the year,— one in the spring and the other in the autumn,— these sittings extending through a number of days. "Extraordinary" sessions can be called at any time by the sindaco, by the giunta, or by one third of the members of the council. In practice the councils of the large cities meet with considerable frequency and regularity.

Council meetings.

The ordinary government of the commune is in the hands of the giunta, or standing executive committee of the council. The members of this committee are chosen for two years, one half of them being appointed annually. The sindaco presides over their meetings as he does over those of the full council. This select body has also the appointing power, and is regarded

The giunta and its duties.

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as "the government" of the commune. In the largest cities,— Naples, Rome, Milan,— the giunta consists of ten members and four substitutes. In cities of the next grade there are eight members, and the number decreases to two for the communes having less than three thousand people. The giunta is accountable to the full council, and all its doings are carefully reported and reviewed. The council elects from its own numbers the sindaco, or mayor, for a term of three years. He is at once an official representing the general government and the chief executive of the commune, his double character thus being the same as that of the French mayors or the Belgian burgomasters.

The mayor.

Required functions of the communes.

The law makes it obligatory upon the authorities of every commune to provide each year for the cost of maintaining the administration; for keeping the registers of the State, showing births, deaths, marriages, electoral lists, army-service rolls, etc.; for the maintenance of elementary schools; for the ordinary public works, such as streets, edifices, and aqueducts; for cemeteries; for illumination; for a certain amount of medical and sanitary service; for the maintenance of the local police; for jails and police courts, and for other ordinary and suitable objects; while it is left optional with the communes to enter upon various additional undertakings, the approval of the provincial authorities being requisite, as a rule, for new or extraordinary projects.

Optional tasks.

The octroi and other revenue sources.

As in France, the largest independent source of revenue accorded to the municipalities is the octroi taxes levied at the gates upon wines, building materials and various articles of ordinary consumption as they enter from without. The source next in importance is the taxes upon houses and land added for communal purposes to the government's levies.

These imposts are extremely heavy, often amounting to more than half the gross rental value. I am told in Rome that the house taxes are there equal to about 65 per cent. of the rents. A variety of minor taxes and sources of income complete the amount of revenue necessary to meet the expanding outlays.

I have indicated as succinctly as possible the main features of a municipal system that is elaborated with great distinctness and detail in the important new piece of legislation to which I have referred. Suffice it then to add that this uniform and modernized framework of administration seems adequate to support the rapidly increasing magnitude and variety of the functions laid upon the government of the Italian communities. For example, Italy had long needed a complete and efficient system of sanitary administration. Obviously this desideratum could not be effected to the best advantage without the aid of a good system of local administration in general. For several years the sanitary specialists and the publicists of Italy were studying and comparing the health regulations of England, Germany, America, and other countries, with a view to the entire revision and consolidation of the Italian laws pertaining to the preservation of the public health. These studies were embodied in various legislative projects, and at length took form in a bill introduced by the minister of the interior, Signor Crispi, toward the close of 1887. Besides providing for central and provincial sanitary authorities, the measure, which was duly enacted, made large use of the sindaco and the ordinary government of the commune for the regulation of all matters relating to the local health. The result now promises to be that within a few years Italy may be able to teach other nations useful lessons in the art of sanitary administration.

An adequate framework.

Sanitary organization.

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Whatever may be said in criticism of ruthless changes wrought by the ambitious municipal authorities of other Italian cities, there can be little complaint brought against Milan for the manner in which it has adopted the modern régime. It has won the right to be enrolled with the well-administered cities of the world. As the capital of the prosperous and energetic Lombards, its affairs have fortunately been in the hands of its most enlightened citizens since 1860, when Lombardy, with the other north Italian provinces, was released from a foreign yoke and became a part of united Italy, under the constitutional rule of Victor Emmanuel and under an administrative system which had been framed in the liberal mood of 1848 for the kingdom of Sardinia. It is true that Milan also was rich in medieval memories and survivals; but comparatively it was not so interesting from the standpoint of the old conditions as many another Italian town. Its ambition to become a conveniently appointed, a clean and wholesome, and, in short, a distinctively modern center of nineteenth-century European activities has seemed to most men to be altogether reasonable. Accordingly, vast changes have been wrought, with general commendation. In the period from 1860 to 1880 these took the form chiefly of street improvements, similar to those that were contemporaneously transforming the French towns. The changes at Milan extended from the core to the circumference. The Piazza del Duomo in front of the cathedral was greatly enlarged, and a series of widened and straightened main thoroughfares was made to radiate from this center to all the outer portions of the town, which is a fairly symmetrical polygon in shape. Street-railway and omnibus lines were brought to a focus at the Piazza del Duomo, which was also joined with the neighboring Piazza della Scala on the north by the most

Milan's good administration.

Street improvements.

Central facilities.

magnificent arcades in the world, and with the ancient Piazza de' Mercanti (almost adjacent on the west) by broad streets. Thus through brave demolitions and wise rearrangements Milan has created what so few cities possess — an adequate arterial center. The city is growing rapidly in its outer zone, and every year demonstrates more completely the advantages of a central receiving and distributing reservoir for the daily flux of population, such as the broad Piazza del Duomo furnishes, with its dozen or more radiating thoroughfares and its eight or ten converging street-railway lines. In the Piazza della Scala, entered from the Piazza del Duomo by the vast and stately arcade known as the Galleria Vittorio Emanuele, is the medieval Palace Marino, which was adapted in 1861 to the uses of the municipality as a town-hall, and has continued to be occupied as the home of the "municipio." Here also is the great opera house of Milan, the Scala. CHAP. IV.

The partial rectification of the inner city's thoroughfares was accompanied by sweeping achievements in the outer zone, and in the further zone of suburbs lying beyond the walls. The communal limits are marked by bastioned fortifications, which are pierced by twelve or more gateways. Just outside the walls is an encircling boulevard handsomely laid out, with a belt street-railway line which connects at the several gates with radial lines. Most of those radial lines are extended for some distance to serve the outer suburbs, and the administrative municipality has acquired control of the external belt. The circumference of the engirdling walls is seven or eight miles. The ancient, innermost Milan is surrounded by canals, which identify the course of the old-time moat; and along the canal line is an inner circuit of modernized streets, upon which it is now proposed to operate an

Suburban changes.

The girdle lines.

CHAP. IV.

interior belt-line tramway, crossing the radial avenues at points about midway between the Piazza del Duomo and the city walls. Eventually the external suburbs, which already contain a considerable population — and which are all massed along the encircling boulevard with their chief agglomerations at the points where the radials emerge from the city gates,— will have become so important as to require an unobstructed connection with the city; and the useless walls will be doomed.

Meanwhile, the street reforms and the visible improvements in the ground-plan of the city are progressing steadily. As an instance of the new improvement work there should be mentioned the Via Dante, a magnificent radial very recently constructed, which leads to the beautiful new park in the northwestern part of the city. There had long been retained within the town, at the rear of the old "Castello," a vast military drill-ground, extending from the inner to the outer lines of circuit. By consent of the national government, the city authorities have recently laid out a large part of this space as the chief park of Milan, and an area of perhaps equal extent has been arranged with handsome streets, and sold for private residence sites. This extremely valuable land has brought into the municipal treasury a large fund of money, with which a variety of public improvements has been initiated or authorized. The Via Dante was constructed as the direct approach from the heart of the city to the curved front of the symmetrical new park. It is paved with wooden blocks on a concrete foundation, is lighted with electricity, and is traversed by an electric street-railway. But it is more notable for its underground construction than for its beautifully executed surface; for, apart from the main sewers, there are subways on either side of the street, six feet high by four or five

The Via Dante.

A new park.

An improvement fund.

feet wide. These subways adjoin the front foundation wall of the houses, and make it easy to inspect and repair the drain-pipes that connect the houses with the sewers. Within the subways are placed the water-pipes, gas-pipes, electric wires, etc; and passages extend from them to the main sewers. It is considered in Milan that no street elsewhere in Europe so completely embodies the best principles of construction — below the surface if not above — as the new Via Dante.

Convenient subways.

When the more recent plans for municipal improvement were adopted, the city government, with commendable forethought, secured the annexation of a zone of suburban territory outside the wall of circumvallation to the average width of perhaps one mile. The so-called *piano regolatore* — that is to say, the plan for regulating and rearranging the thoroughfare-system,— was thus made to embrace an area very much larger than that of the city proper as bounded by the bastions. Broad and generous ideas have governed these newest projects for the expansion of Milan, and the suburbs will be well supplied with small parks, tree-lined avenues, and modern facilities in general. The sewer-system of the city is now in course of reconstruction, a considerable mileage of modern conduits having been added every year since the new system was agreed upon in 1888. The fund accruing from the sale of the army drill-ground, already mentioned, gave the impetus to the new sewer-system as well as to other material reforms, and the work is being achieved in the most satisfactory manner. At an earlier period, a swift stream, the Seveso, had been walled in and covered over, and had been made to perform the functions of a collecteur or principal drainage tunnel. It remains the central trunk sewer, and carries the drainage of Milan to the Po, and

Timely annexation.

The new sewer system.

CHAP. IV.

thence to the Adriatic. It passes under the Cathedral Piazza at the heart of the city. The new streets are built with proper sewers, and the older ones are being gradually supplied. Improved pavements and sidewalks form a part of the scheme of renovation, and the street-cleaning system of Milan has been developed to a point of very high efficiency.

Paving and cleansing.

The street-railways have heretofore been under the control of a single company whose charters expire in 1896. It has been one of the most efficient systems in Europe, and has resembled in its equipment and methods the best of the American horse-railway systems. The fare in Milan, for an ordinary ride (distances being short as compared with those on American lines), is ten centimes (equivalent to an English penny or two American cents). The company had long been prosperous, and the terms of its charter required the payment to the city of about ten per cent. of its gross receipts, the yearly sum thus paid to the municipal treasury having amounted for some years past to nearly three hundred thousand francs. When negotiations were recently entered upon for the renewal of the company's charter for another term beginning in 1896, it was made a condition by the city authorities that various new lines and prolongations of old ones should be built at once, and that the city's proportion of the gross receipts should be increased considerably. The company demurred on account of the expense of the new lines; whereupon the Edison Electric Lighting Company, which was then furnishing illumination for some of the public streets, made an application for the entire transit concession, proposing to substitute the electric trolley for horses, to build as many new lines as the municipal government required, and to pay the city fifteen per cent. of the gross receipts after the opening years, the payments for a short time

Street-railway system.

Payments to city treasury.

Franchise questions.

being at the rate of ten or twelve per cent. The municipality was favorably disposed toward this proposition, but first desired an experimental test; and accordingly the electric line was laid upon the new Via Dante. It now appears probable that horses will be superseded by electricity for the entire Milan system. The plan seems to be to suspend the trolley wire from cross-wires attached to ornamental brackets projecting from the houses. The overhead wires are not condemned on the score of their interference with the extinguishment of fires, for the excellent reason that disastrous fires are practically unknown. The underground trolley would not be feasible in Milan until the new sewer-system was finished.

Electric trolley system favored.

The gas-supply of Milan is provided by an Anglo-French company which had a charter extending to the year 1910. That charter has recently been extended to the year 1925 in consideration of a great reduction in the price of gas. The municipal government stipulated that the company should make an immediate reduction to private consumers from the existing price of forty centimes per cubic meter to twenty-five centimes, with a provision for further gradual reduction to nineteen or twenty centimes. Still better terms were secured for the city itself as a public consumer. Milan has also recently granted a mutually advantageous franchise to the Edison Electric Company, which has a contract for lighting certain streets and squares for a period of years.

The gas supply.

Electric lighting.

The question of a suitable supply of drinking water has been a serious one in Milan for many years, and it has been investigated with a rare patience and intelligence by the municipal authorities. Plans for bringing the supply from the region of lakes and pure mountain streams, at Como or Bergamo, were frustrated by the water rights of industrial and irri-

The question of water.

CHAP. IV.

gation companies along the proposed routes. Foreign engineers from a number of countries joined in submitting competitive plans a few years ago, and a dozen interesting schemes were drawn up. But most of these were too expensive for practical consideration. Two of the schemes, however, proposed driven wells, in view of highly favorable geological conditions. The department of public works sank a few "American tubes" as an experiment, with results that were unexpectedly satisfactory. Accordingly, in 1890–91 some large artesian wells were driven at "the Arena," adjoining the new park, and distribution was begun upon a small scale. The analyses of the water thus obtained have justified the adoption of the driven-well system for the entire supply of potable water; and since the quantity that may readily be obtained at reasonable cost by this method is unlimited, the work of extension has gone steadily forward. Heretofore, the Milanese have relied upon ordinary well-water for drinking and domestic uses, while the canal system has supplied ample amounts of water for street-cleaning and industrial purposes.

Artesian wells adopted.

For some years past there has been constant inspection of the common wells, in order to guard against infection; and they are being gradually closed as the new supply is extended. The complete use of the artesian water will reinforce a sanitary system that has much to commend it in other respects. The municipal laboratory as administered in Milan is an admirable public agency. The service of disinfection is highly praised, and all the new methods by which the health of communities may be protected are ardently studied and applied by the sanitary authorities. The unsanitary modes of life of the masses of the laboring population are not to be wholly reformed in a single generation; and, moreover, while the de-

Sanitary vigilance

molitions and reconstructions have done much to improve the worst slums, the housing conditions of the inner city remain to a large extent unwholesome. And thus the death-rate is still higher than that of a few of the best communities of other countries. Nevertheless, the rapid population-growth of the past twenty-five years has had the benefit of improved building regulations; and the average social condition of the Milanese has been wonderfully improved. Before 1880, the Milan death-rate regularly exceeded 30 per 1000, and in some years it was much higher than that. Since 1890 it has been strikingly lower, and in 1894 it reached the exceptionally low figure of 21. The population, meanwhile, had grown from about 330,000 at the opening of 1884 to about 430,000 on January 1, 1894 — a gain of 30 per cent. in ten years. The statistical work of the municipal government is exceedingly thorough, and its relation to the public-health services is very important.

Slum conditions.

Decline in death-rate.

Population.

Statistical work.

It is well known that religious questions have interfered with the rapid development of a system of free, secular public schools in the Italian towns. But the Milan municipality has accomplished much in the educational field within a comparatively short time. Many new school buildings have been erected since 1880, and nearly a thousand teachers are employed in the free public schools, 31,276 pupils being enrolled in 1892, with several thousand more in the evening classes. The municipal government, moreover, maintains an admirable series of technical schools and special institutions, besides normal schools and the regular high schools.

Progress of education.

Technical schools.

It is pleasant to be assured that in all the vigorous activities which mark the municipal government of Milan, the foremost citizens take the leading part. The giunta is composed of men of the best qualifica-

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High character of municipal leaders.

tions, who as a rule possess wealth and are glad to devote themselves to the affairs of the community. In a word, the aristocratic element is in executive control. The council contains its more popular elements, but is representative of the best classes in the town. It has its sprinkling of active business men, lawyers, architects, and engineers; but, taking the municipal government as a whole, it seems to be chiefly in the hands of the "old families"; and it certainly commands the best talent that the city affords. In all its large operations, involving the making of contracts with corporations and the expenditure of great sums for public improvement, the municipal government of Milan is said to have kept itself above so much as the suspicion of jobbery or corrupt methods; and its intelligence and good taste have been conspicuously displayed in almost everything it has done or sanctioned. Reëlection of councilors is quite usual, and the yearly municipal election, at which sixteen of the eighty council seats are filled, is seldom attended with much excitement. Thus in the election of 1892, the number of voters registered on the municipal electoral rolls being 44,594, there were only 14,177 votes actually cast, and this would appear to be an average election.

Freedom from jobbery.

Elections.

Turin and Genoa.

The good character of the municipal administration of Milan is by no means a solitary instance. I am assured that Turin and Genoa also enjoy the benefits of honest and efficient city governments, and that it is the prevailing custom of the north Italian cities to intrust their public affairs to the direction of their most talented and prominent citizens. This testimony seems to me to be confirmed by such observations and direct investigations as I have been able to make. Genoa has made conspicuously successful

efforts to improve her harbor facilities, great sums having been expended with resulting benefits to commerce. The location of Genoa, so closely hemmed in by steep environing hills, has made it difficult to modernize the street-system, although a number of great new thoroughfares have been opened. Among the most recent improvements has been a series of notable connecting boulevards following the contour of the suburban hills, and affording marvelous sea views. The route as a whole is known as the Via di Circonvallazione a Monte. The growth of Genoa and its suburbs — the total population of which has practically doubled in a period of about thirty years — has necessitated much modern building in the outskirts on the higher slopes, where air, water, and drainage are far better than in the congested old town below. And thus it requires no special endowments of optimism to discover marked gains in the average condition of the people, while the vital statistics — so elaborately and thoroughly recorded under the admirable new sanitary code of Italy — show unerringly the better security of child-life, the lessened ravages of infectious diseases, and the decline in the general mortality-rate. I am impressed, as I examine the municipal documents and reports of Genoa, with the conscientious and thorough organization of all the departments of the city government. It is evident that the finances are administered upon good business principles; that the public works are in the hands of competent engineers; that the schools and charities are well conducted, and that the giunta knows how to deal with all the town's affairs in an orderly, well-balanced fashion, adapting means to ends, and shaping the municipal administration intelligently toward the best material and moral progress of the community.

Genoa's harbor and streets.

Social progress.

Sound administrative methods.

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Turin's regularity.

Turin is a larger city than Genoa, and a very prosperous and well-conducted one, with regularity as its distinguishing quality in all things. Its street system is as rectangular as any in America; but this is not due altogether to modern rectifications. It seems that Turin was laid out as a new town for a Roman colony in the time of the Emperor Augustus, and that it was then inclosed with a rectangular wall and provided with a checker-board street system. The archeologists hold that the present streets of the old part of Turin follow the lines marked out by the civil engineers of the Augustan project. The additions to the original town have been carried out upon the rectangular plan, with the result of a regularity hardly equaled by any other European city. From 1859 to 1865 Turin was the seat of government of the new Italian kingdom. Nearly every one of the chief cities of Italy has, within a generation, experienced what Western American towns term a "boom." The booming period for Turin was from 1860 to 1865. There was much new building, many modern public enterprises were undertaken, and population grew apace. The removal of the capital to Florence in 1865 was a sore disappointment to the citizens of Turin, and for a little time the population fell off, and public and private enterprise was checked. But the good citizens of Turin, with the vigorous aid of the municipal government, turned their attention more earnestly than ever before to the town's industrial and commercial development. Water-power was introduced from the high lands in the vicinity as a municipal enterprise, and diversified manufacturing began to flourish unwontedly. In those palmy days of its political importance, Turin had 200,000 people; but after thirty years it has grown to nearly 350,000, and has ceased to reflect with bitterness upon the loss it suffered in

Ancient beginnings.

Turin's "boom" period.

Reaction and recovery.

The new industrial era.

1865. Its natural health conditions are favorable, with good water from the mountains at hand, and suitable drainage provided by its river, the Po; and there has been an intelligent adoption of sanitary administrative reforms. The death-rate, which from 1875 to 1885 averaged about 26, was only 21 in 1893 and 20.6 in 1894. These years were perhaps exceptional; but without a doubt the improved public methods have resulted in a permanent reduction of mortality.

Health improvements.

With the transfer of the seat of government, the speculative wave of modern change and expansion, which had enveloped Turin in the period from 1860 to 1865, passed on to Florence. The metamorphosis which followed in the years 1865–71 attracted far more comment than the changes which had come about at Turin or Milan, for obvious reasons. Florence was a smaller city, with comparatively slight industrial importance, but with a marvelous wealth of historic associations and of surviving medieval art and architecture. The removal of the city walls in order to create Parisian boulevards, the rapid projection of a new system of main streets throughout the entire municipal area, the laying out of new quarters, and the speculative construction of many new houses, with a growth of population from about 100,000 in 1861 to 167,000 in 1871,—all this meant a sudden transformation that was exceedingly painful to foreign artists, poets, and students of the medieval Florence. The removal of the capital to Rome caused a reaction in Florence that bankrupted many individuals, and almost ruined the municipal finances. The population declined sharply with the removal of the governmental bureaus, and even in 1881 it was only 135,000 —20 per cent. less than in 1871. But time and the

Florence and its metamorphosis.

The speculative period.

Reaction and depression.

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inevitable progress of cities have more than restored the loss, and at the end of 1893 the population exceeded 200,000. Moreover, the later improvements have been executed with better taste and judgment in matters of detail than those initiated in 1865 and the years immediately following; and it is now confessed that Florence has not been altogether "vandalized" by the progressive Italians of the new régime. The medieval monuments of architecture and the priceless art collections are hardly less interesting in their modern setting; and to those who can understand that the history of our own time possesses no less dignity and value than the history of other centuries, it gives no shock to find a modern municipal government occupying the Palazzo Vecchio, in which the signors of the Florentine Republic once had their seat of government, and which has witnessed six eventful centuries. Just six hundred years ago Florence was undergoing a more relentless reconstruction than that of our own generation. It was then that the present town-hall was built, the old walls were demolished, suburbs were annexed, and the new walls were erected which have in our own day given place to the *Viale* or boulevards. The fascinating thing in Italy is the continuity of life, and the determination to keep building new history upon the foundations of the old. The ancient Romans were mighty road-makers, aqueduct-builders, and civil engineers; and the beautiful avenues of Florence, with the extensive tram-lines traversing the town and its adjacent regions, would have their heartiest approval if appeal could be made to them; while the electric road up the heights to antique Fiesole, or the steam tram-line on the splendid new Viale dei Colli (a winding boulevard on the slopes of the suburban hills) would seem to them the very consummation of things most to be desired. They

More recent public works.

Municipal offices in the Palazzo Vecchio.

Florence six hundred years ago.

Spirit of the ancient Romans.

could not possibly comprehend the "Ruskinian affectation" (to quote Mr. Frederic Harrison) of sentimental and obscurantist visitors to Italy, who "shudder at a railroad," and "whine over the conditions of modern progress." It does not follow that all attempts at modernization are either necessary or wisely conceived, and doubtless mistakes have been made at Florence. But the painful sharpness of contrast is disappearing, and the new begins to harmonize with the old under the softening hand of time, aided by the more refined taste that now prevails.

The new Rome.

But transformations elsewhere in Italy were wholly eclipsed by those inaugurated at Rome when the Quirinal became the seat of the national government, the sovereignty of the papal states having at last been merged with that of the now completed kingdom. Such an abrupt change from medieval to modern conditions has not been witnessed elsewhere. It was as if all the European changes since 1789 had been successfully repelled from invading the domains of the Church, and had then suddenly burst across the boundaries in one resistless flood. "There was," exclaimed Herman Grimm, "an infinite calm, a loveliness and stillness in which the poet and the scholar could draw near to the mighty dead who had once been there as living men. There was nothing like it on earth. Now it is destroyed forever. In the stead of this there are the stench of engines, the dust of shattered bricks, the scream of steam whistles, the mounds of rubbish, the poles of scaffolding, long lines of houses raised in frantic haste on malarious soil, enormous barracks representative of the martial law required to hold in check a liberated people; all is dirt, noise, confusion, hideousness, crowding, clamor, avarice." Mr. Frederic Harrison, who admits the inevitability of the changes

A startling transition.

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As witnessed by an English observer.

and endeavors not to judge them harshly, does not try to conceal his sense of loss in the disappearance of Rome's "medieval halo." And he reminds us of the "fern-clad ruins standing in open spaces, gardens or vineyards; the huge solitudes within the walls; . . . the narrow, ill-lighted streets; the swarm of monks, friars, and prelates of every order and race; the air of mouldering abandonment in the ancient city, as of some corner of medieval Europe left forgotten and untouched by modern progress, with all the historic glamour, the pictorial squalor, the Turkish routine, all the magnificence of obsolete forms of civilization which clung round the Vatican and were seen there only in western Europe." Such was the Rome of Mr. Harrison's first visit; and now he finds that the "Rome, which, thirty years ago, was a vision of the past, is to-day a busy Italian town, with a dozen museums, striving to become a third-rate Paris." Mr. Harrison does full justice to the archeological intelligence and solicitude of the new possessors of Rome, and evidently perceives that the rapid growth of population which followed the establishment of the capital there must in any case have compelled innumerable modern changes. Wherefore he does not inveigh against tendencies which no regrets or protests could have checked and for which it would be useless to ascribe blame.

How Rome was governed before 1870.

The people of Rome knew practically nothing of communal self-government under the papal régime. Prior to 1847 there sat a sort of municipal council on the Capitoline, but it was not a representative body and it had powers of the most limited description. The meagerness of its functions is best illustrated by the size of its budget. It was allowed by the authorities of the Papal State an income of 35,000 scudi (188,125 lire, less than thirty-eight thousand dollars) — a sum hardly

equal to the expenditure of an enterprising village. It is to the credit of Pope Pius IX. that one of his first pontifical acts was the granting of a municipal constitution to Rome. This was in 1847. The new charter had many features of a comparatively liberal character. But in the following year a great wave of revolution against arbitrary government swept across Europe, and the Pope was driven from Rome only to be reinstated a year or two later by French arms. At the beginning of 1851 the papal government promulgated a law depriving the municipal authorities of most of their independent powers and again reducing the municipality to a mere shadow. From 1851 to 1870 the communal budget ranged from about 2,000,000 to about 3,500,000 lire annually (from $400,000 to $700,000. Among the principal sources of income were the regular appropriations from the papal government of about $200,000 a year; the taxes superimposed upon the government's levies on houses and lands and on wine and spirits, and the tax upon horses and domestic animals. The six principal items of expenditure were for streets and ordinary public works, administration, lighting, cleansing, cemeteries, and festivals.

Municipal revenue and expenditure.

In view of the completeness of the papal authority and of the immense wealth of the Church, the physical condition of the holy city was far from creditable to the government. In 1870, when the papal provinces became a part of the new kingdom of Italy, and Rome was made the royal capital, its people were granted the municipal liberties that the other cities of Italy enjoyed, and the new era of municipal improvement was entered upon immediately. How promptly the public services were extended to meet the needs of a great community can best be expressed in the condensed terms of budgetary statistics. The

The church's neglect of Rome.

Municipal home-rule in 1870.

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Budgetary expansion.

municipal income, which had been only 3,500,000 lire in 1870, and which for twenty years had averaged only about 2,700,000 lire, exceeded 19,000,000 in 1872, and reached 28,000,000 in 1885. The average municipal income and expenditure for the twenty years following the new order of things instituted in 1870, was nearly ten times as great as the average for the twenty years immediately preceding.

The comparison admirably illustrates the enlargement of public functions in recent times. In most cities the expansion had been gradual and the contrast was less sharp. But Rome seemed in a year to have made up for a century of lost time. Until 1870 the public services were costing at the rate of about fourteen lire a year for each inhabitant. In 1872 the expenditure per capita was ninety lire. Growth of population has since diminished the per-capita sum; but the annual average is seventy-five or eighty lire.

New public outlays.

Under the old régime the street-lighting was insufficient; it was immediately so extended as to cost three and a half times as much as before. Street-scavenging in like manner was made vastly more efficient. The sanitary service prior to 1870 had cost about 75,000 lire a year. After 1871 it amounted to 1,400,000 a year, an increase of nearly twentyfold. The outlay for public works, including streets, sewers, accommodation for the various public services and the other usual items, also illustrates the radical change to which I have referred. Under the new régime this outlay at once expanded several-fold. In the old days there were no communal schools, while now the maintenance of elementary instruction under the compulsory school law entails a very considerable expense. The fire department has been reorganized, modernized, and enlarged.

Previous to 1871 the city was not supplied with a

system of sewers. The new authorities adopted a scientific plan for the complete drainage of the city, using the Cloaca Maxima and other gigantic sewers of ancient Rome for the main tunnels. The system has been steadily worked out, with immense advantage to the health and convenience of the people. The water-supply of Rome had been famous in the ancient times, numerous high sources in the vicinity of the city having always been ready to yield an abundant quantity; and from time to time the ancient Romans constructed new aqueducts to meet the needs of the growing metropolis. During the later period of the Roman empire, the city was magnificently furnished with pure water. But in the dark period that followed the triumph of the barbarian invaders, both the water-supply and the drainage-system became deranged. The sewers were choked up, and the aqueducts were broken down. The time came when the Roman population was obliged to resort to the Tiber, and to dig wells, for its water-supply. The Tiber water is unfit for domestic uses; and, as might easily be believed of so ancient a city, the subsoil is saturated with poisonous impurities that render well-water dangerously unwholesome. The later popes accomplished some good work in the restoration of aqueducts; but until the new and secular order of things was fairly inaugurated, the water-system remained lamentably bad. This was the more inexcusable because the situation made a good supply and thorough distribution so very feasible. It was not until 1885,—as the result of alarming disclosures by the chemists and bacteriologists of a special commission on the hygiene of the municipality of Rome,—that all the wells were peremptorily closed. The municipal authorities have repaired the splendid old aqueducts, improved the reservoirs, and

Roman drainage.

Rome's water supply.

Ancient system deranged.

Wells and the Tiber.

Wells closed in 1885.

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The new aqueduct supply.

brought the daily supply up to a total of 60,000,000 gallons, or more,—about 150 gallons a day for each inhabitant. To take the place of the closed wells the municipal authorities have added greatly to the number of public fountains. At the beginning of 1886 there were in the city 162 ancient fountains of public supply, and 167 more that had been opened since 1870, not counting 25 or 30 fountains of a monumental or artistic character. The number has been somewhat increased since 1886, and this record is among the most creditable of the many reforms of the new municipality.

Public fountains.

A most gratifying reduction of the death-rate, especially as regards those classes of diseases that are amenable to sanitary science, has followed the improvements of drainage, of water-supply, of cleansing, and of general health administration. One of the first acts of the new government in 1870 was the establishment of an office of *Igiene ed assistenza sanitaria;* and the functions and usefulness of this department have been steadily augmented from year to year. This work is carefully systematized, and includes a service of food inspection, one of house-to-house inspection for nuisances, a vaccination service, a new hospital system for the isolation of epidemic diseases with the chief establishment in a secluded area on the Aventine Hill, a system of sanitary regulation for cemeteries and funerals, a house service of medical and health assistance for the poor, a service of public dormitories, an exceedingly interesting and useful series of stations for night medical relief, and still other distinct features. The death-rate of Rome in 1876 was within a fraction of 30 per 1000. It was lower in 1877, but the average for 1878, 1879, and 1880 was just under 28. In 1885 it was 26; in 1893, 22.3, and in 1894 only 19.4.

Organization of sanitary services.

Declining rate of mortality.

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The systematic reform of the street-system of Rome did not begin at once with the change of administration. It seemed to be forced upon the municipality by the development of population and the necessity for accommodating a traffic which had enormously increased. The railroad system of Italy had been extended, and Rome had become one of its centers. In 1860 the population was only 184,000. In 1870 it was 226,000, and in 1880 it had increased to more than 300,000; and the temporary sojourners and visitors who thronged the streets were a vastly multiplied host. Moreover, there was prospect of a continued rapid growth. Half a million people before the end of the century appeared a reasonable estimate; and how could such a community, busy and eager, rest content in the absence of main street arteries and of the facilities for transit and traffic that have become universal in this age? Certainly the outlook of the municipal authorities of 1880 has been justified by the subsequent facts. The population at the opening of 1894 exceeded 451,000, and the gains had been at a rate which made it reasonable to expect that the figures would reach 500,000 in 1900. What the Roman people could have done under these conditions of growth and commercial progress without a reformed street-system, I have never heard any of the critics attempt to explain.

Need of street reforms.

Continued population-growth.

Some preliminary and detached improvements had been made earlier, but it was not until 1883 that the so-called piano regolatore — the complete scheme for the straightening and enlarging of the chief thoroughfare system, — was finally adopted and set in motion. It had for its examples the notable improvements of recent years in the street-systems of a score of important European cities from England to Hungary. It has seemed to me that the Roman project was a rea-

The plans of 1883.

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sonable and conservative one; that is to say, as little arbitrary and destructive as circumstances could well allow, and notably different in its spirit and methods from the iconoclastic and uncompromising nature of the earlier Parisian projects. Inasmuch as nearly every street in Rome — except in the new suburbs — was narrow and irregular, leading nowhere in particular, the reformers determined that some main arteries were indispensable, and proceeded to create them. It was resolved to contract a municipal loan of 150,000,000 lire ($30,000,000) for the accomplishment of the work, the Italian government lending its aid by a guaranty of the debt. One of the first great works undertaken was the creation of the new Via Nazionale in extension eastward of the Corso Vittorio Emanuele, at a cost of more than twelve million lire. At the western end of this broad Corso, which until 1890 led nowhither, heavy demolitions were made to cut the thoroughfare through to the new Tiber bridge Vittorio Emanuele, and further demolitions on the west side of the Tiber were to continue the avenue as a broad and unobstructed approach to the Piazza of St. Peter's. Another of the new streets is the Via Cavour, leading eastward from the Forum to the main railway station. At the foot of the Corso, and extending to the east side of the Forum, very important demolitions were required by the plan. The magnificent new retaining walls of the Tiber and the new bridges Garibaldi and Umberto were built as a part of this huge improvement scheme; and broad thoroughfares were projected, with much demolition of old structures, as approaches to these bridges. These details are sufficient perhaps to indicate the character of a project which required more than one decade for its entire completion, but which has already effected most noteworthy transformations.

Public-works loan.

Some of the new achievements.

But still more recent than the "piano regolatore" are other glittering projects evolved by the enterprising municipal government of Rome, with the coöperation of an ambitious national government that desires to make its capital one of the finest and most attractive of modern cities. One of these projects is the establishment of the lines of a *Passeggiata Archeologica*. Within the area thus delimited it was determined that there should be no further erection of private buildings, and it was the purpose of the government to exappropriate and acquire the entire tract, and convert it into a public park, whose chief attractions would be the ruined monuments of old Rome. The passeggiata contains within its precincts the Forum, the Coliseum, the Forum of Trajan, the baths of Titus, the remains of the palaces of the Cæsars on the Palatine, the Circus Maximus, the baths of Caracalla, the temples of Vesta and Fortuna, and other ancient remains, and includes an extensive area of land made up of parts of the Capitoline, Aventine, Palatine, and Cœlian hills,—an area densely populated in ancient times, but now almost bare, and lying to the south of the heart of the modern city. Not only would this reserved area make a noble park, but it would also, when cleared according to the proposed plans, render the archeological remains by far more intelligible in their relative positions than they have been hitherto. Moreover, new and instructive discoveries are constantly being made by excavations.

An archæological reservation.

Location and contents.

A much larger project, so far as cost and superficies are concerned, is that of a grand park and boulevard-system in the district now occupied by scattered villas and gardens north of the Porta Pinciana and within the bend of the Tiber. This is planned upon a magnificent scale, and its realization will cost an enormous sum. Inasmuch as the project itself is defi-

A proposed park.

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nitely conceived, and is agreed upon by the governments of the State and the municipality, it might be carried into effect gradually and the expenditure distributed through a long series of years. But financial difficulties are compelling the postponement of active work on such projects, perhaps until the opening of the new century. I have instanced enough to show that the rehabilitation of Rome as begun and as planned will entitle it in due time to rank among the most progressive of modern cities.

While these improvements have been made under public auspices, Rome has been the scene of a remarkable amount of building by private owners. Along the revised or newly created business thoroughfares are to be found long lines of new commercial edifices; but it is in the erection of large and high residence blocks that the building activity has been greatest. Lying adjacent to the older city on every side are new quarters platted in regular squares, and largely built upon with plain but superior and massive apartment-houses. The greater part of this new construction has been made since 1880, and much is now in progress. Thus a large addition has, within a few years, been built up in very regular blocks just north of the castle San Angelo; and as one looks out over it from the eastern balconies of the Vatican, the effect of Chicago-like newness is very strange. The most extensive of these new quarters are, however, at the opposite side of the city, in the east and northeast. For its own official uses the government caused to be prepared, several years ago, an elaborate map showing by different colors the demolitions required under the street-regulation plan, the proposed boulevard system in the north, with the projected new Margherita Park, the perimeter of the passeggiata archeologica in the south, the tracts of ground occupied or

Activity in private building.

A map of the new Rome.

reserved by the government as sites of actual or proposed public buildings, the built-up area as it existed in 1870, the new house-building accomplished in the decade 1870–80, that from 1880 to 1888, and that in process or anticipation in 1889. The rapid creation of a new Rome, as thus shown graphically, is most impressive.

It is a satisfaction to observe that the new tenement-houses of Rome are a vast improvement over the old ones in structural and sanitary respects. While the housing of the population of large cities is admittedly the most serious social question of the day, and while only a few cities have ventured upon the policy of extensive exappropriation, demolition, and rebuilding for the sole or chief purpose of improving the dwellings of the poor, it is fortunate that many cities have been awakened to the important fact that much future evil can be averted by strict regulations as regards the character and arrangements of new houses. The building rules of a city have a public and social importance that is now, tardily, becoming recognized. Of Rome it can certainly be said that the average character of the house accommodation of families has improved materially, although, as yet, the housing of the very poorest classes is probably little better than twenty years ago. The present building regulations of Rome, adopted after very careful consideration in 1887, are among the most approved and advanced in the world. They bring under strict public surveillance everything that has to do with the style, materials, construction, size, and sanitary arrangements of buildings. For example, they establish the rule that the height of buildings must not exceed once and a half the width of the street upon which they front, with the proviso, however, of a minimum height of fourteen meters and a maximum of twenty-four.

Regulation of building.

The new rules at Rome.

Provisions for light and air.

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They require that buildings shall be provided with inner courts, the narrowest side of which shall not measure less than one third the height of the building; and they do not permit a narrower space between houses than the width prescribed for courts.

Those who have examined the buildings of the old, crowded parts of European cities, where there is the least possible free space left unbuilt upon, and therefore the most inadequate provision for air and light, can best appreciate the importance of a regulation requiring a reasonable area of open courts. The Roman regulations further establish the minimum height of ceilings, require that every apartment or group of apartments designed for a family shall have water-supply and sewer connections, and enter into great detail as regards all matters of appearance and health. Gradually, through the operation of these enlightened rules for new building, and through demolitions from time to time of ancient tenements, the housing of the Roman population will become entirely transformed. One section of the new building code of 1887 authorized the *Commissione Edilizia* to make out a list of all structures of an historical and artistic character, and forbade their destruction or alteration, even by their private owners, without public authority. Thus, while Rome is rebuilding, there is nothing of real interest or worth that is allowed to perish.

Other restrictions.

Historic edifices protected.

Rome's municipal undertakings were, however, destined in turn to be surpassed by those of another Italian city. Naples awoke in its turn, and entered in a systematic manner upon what is perhaps the largest definite program of sanitary renovation ever undertaken by any city,— a scheme whose full accomplishment can cost hardly less than 500,000,000 lire

The awakening of Naples.

($100,000,000). The project owes its inception to the cholera epidemic of 1884,—or, rather, the epidemic was the occasion, while the new energy and courage United Italy gave origin to the plan of action. e whole country was aroused in behalf of Naples, d the parliament in 1885 voted an appropriation of 0,000,000 lire toward the cost of a complete new sewer-system, a new water-system, a scheme of sweeping demolitions and street alterations in the low and crowded quarters of the city, and a corresponding plan for the construction of new quarters on the higher ground at the eastern limits, and ultimately on the northern and western slopes. Naturally, much delay was experienced in the arrangement of preliminaries, in negotiations with private owners, and in the development of the plan in detail. The new water-supply was introduced immediately, from high mountain sources near Avellino, fifty or sixty miles distant. The sewer-system was taken in hand also and prosecuted with energy.

An immense program of renovation.

The new water and sewers.

But the *piano di risanamento*—the project of rehabilitating the old quarters—was found as delicate in detail as it was huge in its entirety. It was not until the summer of 1889 that the actual work was begun, in the presence of the king and queen, who had taken a deep interest in it from the beginning. A few statistics may be of assistance in explaining the scope of this undertaking, as furnished by the communal assessor, Professor Alberto Marghieri. The number of proprietors whose property was to be taken in whole or in part was 7100,—5400 of these exappropriations being entire. The awards for such property were estimated at not less than 93,000,000 lire. The amount of ground to be cleared and rebuilt, or to be redeemed and raised to a higher grade, was about 1,000,000 square meters. The area of

The "risanamento" begun in 1889.

Statistics of the condemned area.

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improvement included 271 old streets, of which 144 were to be abolished entirely, and 127 retained and widened. The number of people to be unhoused was about 90,000. Of habitations destined to be destroyed there were 17,000. Churches to the number of 62 were doomed, as were a large number of shops and other establishments. Streets and open squares represented 22 per cent. of the area to be renewed. Under the new scheme they would occupy 62 per cent. of the area. The population of the area had a density in 1889 of 1610 per hectare (2½ acres). This would be reduced to 700 per hectare,— and perhaps to still less; for the new quarters (*piano di ampliamento*) in the suburbs were eventually to provide house-room for 180,000 persons.

Proposed transfer of population.

The carrying out of this vast reform was to be accompanied by the enforcement of improved sanitary laws, and by various minor municipal improvements. It was also believed that a great industrial impetus would be given to Naples, and that as a result of the general stir and agitation the thousands of occupationless plebeians might be evolved into a regular working class. Costly as the great experiment must be, its courageous advocates had no doubt that it would be profitable. They believed that the expenditure would not represent wealth sunk and lost, but on the contrary, that it would be a most advantageous investment for Naples and for Italy. It promises in any event practically to end Italian epidemics; and that result alone would justify a far greater investment, even from the purely commercial point of view. It is pleasant to believe that the new Naples is to be worthy of its beautiful situation and its unsurpassed environment. The quarters undergoing renovation are very old, dating back in part to the Greco-Roman period, and in part to the early middle ages; but there

Motives of the project.

An end of epidemics.

Antiquity of the Naples slums.

was comparatively little of priceless value in their antiquity. The existence of these overcrowded and unwholesome slums is much less disgraceful, when the facts are considered impartially, than is the recent development of crowded and unwholesome slums in American cities, where the neglect of simple and obvious preventive measures has made it certain that drastic and costly remedies must be employed in a future not far distant.

Actual progress.

The Naples projects have made very large advances toward completion, although the execution of the full plans will yet require a number of years. About 50,000,000 lire had been paid to dispossessed owners from 1889 to 1894, the chief new thoroughfares in the old quarters had been constructed, and thousands of good houses had been built in the new districts, in conformity with the requirements of a strict new code of building regulations. Many thousands of people had been transferred to the improved dwellings, and street-railway lines had been placed in operation on the reformed avenues and extended to the attractive suburban additions. The actual carrying out both of the "risanamento" project and of the "ampliamento" schemes were intrusted to private companies with a large capital which act as agents of the municipal government under carefully devised contracts. Although large sums are involved in the necessary operations, it is to be expected that the resales of street frontage on important new business streets, and good financial management in the new residence quarters, will ultimately reimburse the municipal treasury for the greater part of the investment. Meanwhile, the transformations already accomplished have proved themselves eminently advantageous to the city in all the phases of its life. A usual death-rate for Naples until recently was 33 or more per 1000. It is not time yet

Execution of work in hands of contracting companies.

Effect upon mortality.

CHAP. IV. to expect radical results from sanitary reforms to which the domestic life of the people has become adapted only to a limited extent. But the rate for 1894 was reduced to 27.5; and it is likely that the average will henceforth be lower even than this encouraging figure.

As to the Neapolitan population.

Naples remains the most populous Italian city, although Rome and Milan have been gaining upon it rapidly. In the early sixties it had about 450,000 people, and no other city of Italy had nearly half so many. The Neapolitans of thirty years ago were not an effective population, but included great swarms of idlers and beggars. There were in 1895 about 540,000 people in Naples; and the changed times, with new industrial opportunities, have much improved the average status of the inhabitants, and diminished the numbers of the unoccupied poor.

Growth of Palermo.

Since 1880, the growth of Palermo, Sicily's capital, now the fifth Italian city in size, has been very noteworthy. It had in that year hardly more than 200,000 people, while at the opening of 1894 it had 276,000, with the prospect of reaching the 300,000 mark at the end of the decade. The municipality of Palermo has exhibited a surprising vigor in the construction of new avenues, and in the general amplification and adornment of the city. The two broad, straight avenues, which meet at right angles in the heart of the city and cut Palermo into four sections, do not belong to the present era of reconstruction, but were executed by the Spanish viceroys of Sicily, who made Palermo their seat of government in the sixteenth and seventeenth centuries. But many new avenues attest the zeal of the present municipal authorities. The spirit of modern enterprise has taken full possession of the town. New water-works, drainage-schemes, and other sanitary reforms; much attention

Earlier improvements.

Present undertakings.

to paving; rapid progress in the extension of street-railways; a decided taste for electrical applications — all these are characteristics of a town that dates from Phenician times, but feels itself as young and modern as an Australian capital.

There are smaller cities in Italy which have caught the infection of modern progress; but of Bologna and Leghorn, Catania, and the rest, it is needless to discourse. What they are attempting is merely to follow the example of their more important contemporaries. Venice has hitherto escaped any very shocking alterations. Few casual visitors would be likely to have discovered how much attention the Venetian authorities had of late been devoting to various sanitary engineering projects. Happily, the new water-supply of Venice, the new sewer projects, the plan for a great hospital for infectious diseases, and various other proposed reforms could not affect the picturesqueness of the place. But with exceedingly little new construction of houses, the Venetian population has expanded since 1866 by more than 30,000 people. And this increase of 25 per cent. (from about 120,000 to more than 150,000) has resulted in a very serious overcrowding of the old tenements, in consequence of which the death-rate has materially increased, particularly within the past fifteen or twenty years. Obviously, the situation of Venice does not permit an easy and simple overflow into attractive suburbs. To relieve congestion in slums of a growingly bad character, the municipal authorities, with the revision and approval of the central government, have drawn up a project that will necessitate a large amount of demolition and rebuilding, attended with street rectifications and other changes. The limited ground area makes it essential to plan for the most economical utilization of space in reconstruction.

Engineering projects at Venice.

Recent overcrowding of Venetian tenements.

A formidable scheme of reconstruction.

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It is with some misgivings that I have endeavored to acquaint myself with the nature and scope of these plans. So far as I have studied them, however, I have been led toward the welcome impression that their carrying out will not very materially lessen the charm of Venice, and that the parts of the city most frequented by visitors will remain practically undisturbed. Into the details of the pending projects it is not necessary to enter. It is only to be said that the adoption at Venice of a *piano di risanamento e piano regolatore*,— which plans concern themselves with *nuove arterie di comunicazione*,— marks the final victory of the modern spirit of practical progress and of sanitary reform in its relentless assaults upon the famous old cities of western and central Europe.

Venice not to be "Haussmannized."

But modernized, nevertheless.

## CHAPTER V

## THE FRAMEWORK OF GERMAN CITY GOVERNMENT

"MUNICIPAL housekeeping," as a science and an art, evolved out of the conditions of life prevailing in the last half of the nineteenth century, can for various reasons be observed to better advantage in Germany than in any other country. It is true that the German cities had been somewhat tardy in providing themselves with modern conveniences and improvements. But now, having fairly entered upon the task, they are accomplishing it in a more systematic, thorough, and businesslike way than any other cities, whether in Europe, America, or Australia. The Germans have been in their habits of life a rather primitive, simple people — less fastidious than the English, French, or Americans. In large part they have been a rural people; and whether in town or in country, the average family income has been very small, and the ordinary scale of living extremely modest. The arrangements of the towns had partaken of this simple, old-fashioned régime of family and social life, and had been in like manner primitive and unsuited to the demands of a complex, artificial civilization, and altogether regardless of the new sciences of sanitation and city-making.

Municipal progress in Germany.

But a great change has come over the German nation, and nowhere is its altered character shown more distinctly than in the expansion and progress of the

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A pending transformation.

cities. The centers of population are growing with extraordinary rapidity by inflow from the rural districts. The Germans are in the midst of a quick transition from an agricultural into a manufacturing people. The old seats of petty princes or dukes are coming into a transformed and enlarged existence as industrial towns. Railways and traffic have lately become factors of a wholly new importance, helping to emphasize the distinction between town and country and to modernize the character of the towns.

Standards of living altered.

Simultaneously with this recent growth of industries and town population in Germany, there has been — arising in large part from military success and enhanced international prestige and importance — a marked advance in the standards of living, and a new demand for modern and luxurious appointments. An intense quickening of national pride has made the people and the governing authorities eager to adopt late improvements, and ambitious to rival France, England, and America in matters that Germany had before neglected.

Scientific methods.

To this work of modern improvement, especially in public appointments, the Germans seem to have brought more of the scientific spirit and method than any other people. Their habits of thoroughness in research, and of patient, exhaustive treatment of any subject in hand, have fully characterized their new progress in the arts of civilized life.

Effective administrative methods.

Above all, the Germans had already developed a system of public administration more economical and more infallibly effective than could have been found elsewhere; and they were prepared, when the growth of their cities and the new demand for modern improvements made necessary a great increase in the number and variety of public functions, to do in the best possible way whatever it was decided to under-

take. So confident were they, indeed, in the efficiency of their administrative organization, that they dared to assign to the municipalities spheres of action which elsewhere have been left to private effort.

"Municipal socialism."

The Germans have, unquestionably, a higher capacity for organized social action than Anglo-Saxon or Celtic peoples; and the socialism of the State or municipality — or the increase of "collectivism," if one likes that word better than "socialism," meaning thereby the multiplication of the business functions of government — might naturally be expected to have made greater progress in Germany than elsewhere. Moreover, as I have had occasion to remark in writing of affairs in the Danubian valley, when a nation's political and military progress has very much outstripped its industrial progress, public initiative is relatively stronger than private initiative; and it is comparatively easy for the people to agree to act together through their governmental agencies in establishing this or that enterprise of common concern.

Why public initiative is natural in Germany.

In central, eastern, and southeastern Europe private capital is far less highly developed than in France, the Netherlands, England, and the United States; and the recent demand for various modern facilities and improvements has not found native entrepreneurs and private capitalists prepared to meet it adequately. Circumstances have seemed to render it practically necessary for national or municipal governments to inaugurate and conduct many such enterprises. This suggestion has very pertinent bearing upon our general subject of German municipal economics; for, unless due weight were given to such considerations, we should be in danger of making our estimates and comparisons without a proper allowance for the dissimilar conditions that determine the scope of public functions in different countries.

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In the rapidity of its growth, in its regularity, and in its general air of newness, Berlin suggests Chicago. But while Chicago in its buildings and appointments other than governmental and municipal is for the most part superior to Berlin, the German capital is incomparably superior to Chicago in its municipal and public arrangements. Chicago and our other fast-growing American cities find great difficulty in extending urban facilities to keep pace in any decent fashion with the growth of population and the enlargement of area; but in Berlin the authorities have systematically and easily provided for the development of a city that is several times as large as it was in 1860, and that has within a few years been transforming all its services and appointments.

Berlin as a modernized city.

We Americans have such a surfeit at home of new towns and new extensions of older towns, that it is not surprising that we should be looking for the old rather than the new in our European travels. The guide-books are all made upon the supposition that American tourists are painfully eager to see everything of antiquarian or historical interest, and that they care nothing whatever for Europe as the present-day home of progressive peoples. For the most part, therefore, we fail to appreciate the full force and significance of the immense modern impetus that is transforming the European cities. Most of them have an ancient or medieval nucleus, but otherwise they are as new as our American cities, and in many respects they are more modern and enterprising.

Newness of European towns.

Indeed, there seems to be an almost unconquerable delusion in the popular mind that our American cities are the only ones which show the phenomenon of rapid growth, and that their newness excuses their failure to provide well for the common necessities of urban life. I must ask leave to present a few statis-

Comparative growth of German and American cities.

tics to meet this delusion. In 1870 New York was a considerably more populous city than Berlin. It had nearly 950,000 people, while Berlin had barely 800,000. In 1880 Berlin had outgrown New York, and in 1890 it still maintained the lead, having 1,578,794 people as against New York's 1,515,301. Chicago's relative gain has been higher; but Berlin in the past twenty-five years has added as many actual new residents as has Chicago. Thirty years ago Philadelphia was a larger city than Berlin; but since then it has added only half a million souls to its total number, while Berlin has added a million. These figures are cited in order to give a comparative impression of the problems Berlin has had to meet in providing for the accommodation of its expanding municipal household.

Berlin, New York, Chicago, and Philadelphia.

Let us take another instance. In 1875 Hamburg had 348,000 people, and Boston had 342,000. In 1890 Hamburg had 569,260, and Boston had 448,000. Hamburg had gained more than 200,000 in fifteen years, and Boston had gained only a little more than 100,000. Yet Boston's growth has been accounted remarkable. Baltimore is sometimes likened for wealth and prosperity to Hamburg. In the early seventies they were of equal size. But Hamburg has grown twice as fast. In 1880 the German port had 410,127 dwellers, and in 1890 they were 569,260, while Baltimore's census for the same years showed 332,313 and 434,439. The areas of Boston, Baltimore, and Hamburg were about equal.

Hamburg, Boston, and Baltimore.

The third German city in size is Leipsic. It is a manufacturing town which had 127,000 people in 1875, 149,000 in 1880, 170,000 in 1885, and 355,000 in 1890. The annexation of suburbs accounts in part for the immense gain of the half decade from 1885 to 1890; but it also explains the comparatively small gains of the preceding decade, growth being principally in the outer belt. St. Louis grew from 350,000

Leipsic, St. Louis, and San Francisco.

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in 1880 to nearly 452,000 in 1890. But Leipsic has grown at a much higher rate. It has now well-distanced San Francisco, which was considerably the larger in the seventies.

Munich, Breslau, and Cincinnati.

Munich, which has now been slightly outgrown by Leipsic, though formerly much the larger of the two, is still growing at a very respectable rate. In 1875 its denizens were 193,000 in number, and in 1880, 230,000. In 1890 they were 349,000. It has grown at a much higher rate in the past decade or two than the American cities of corresponding size. Breslau, the second city of Prussia, has lost much by emigration; but still it grows. Its population had expanded from 272,900 in 1880 to 335,200 in 1890. Meanwhile Cincinnati had grown from 255,139 to 296,908.

Cologne, Cleveland, Buffalo, and Pittsburg.

In the same decade Cologne had grown from 144,800 to 281,800. This may be compared with the gain of Cleveland (Ohio) from 160,000 to 261,000; with Buffalo's growth from 155,000 to 255,600; and Pittsburg's from 156,000 to 238,600. Cologne was very much the smallest of the four in 1880, and very much the largest of the four in 1890. Yet Buffalo, Pittsburg, and Cleveland have been accounted most remarkable for their expansion in that decade. Dresden, the charming Saxon capital, had 220,800 people in 1880, and New Orleans, our own charming southern capital, had 216,000. Thus they were of nearly equal size. In 1890 Dresden had grown to 276,500, and New Orleans to 242,000. A difference of less than 5000 had increased to one of nearly 35,000. Detroit and Milwaukee had each approximately 205,000 people in 1890, and Magdeburg, Prussia, had 202,000. But Detroit and Milwaukee had each about 116,000 in 1880, while Magdeburg had only 97,500. It should be explained that Magdeburg during the decade had annexed some large suburbs; but it remains true that

Dresden and New Orleans.

Detroit, Magdeburg, and Milwaukee.

its rate of growth compares favorably with that of these two American cities. Frankfort-on-the-Main had 180,000 people by the census of 1890, and Newark, New Jersey, had 181,800. Frankfort had 136,800 in 1880, and Newark had 136,500.

Frankfort and Newark.

Hanover in the ten years had grown from 122,800 to 163,600, and Königsberg from 122,600 to 161,500; Louisville, Kentucky, had in the same period grown from 123,758 to 161,129, and Jersey City had grown from 120,722 to 163,003. Hanover and Königsberg had gained faster than Louisville, but not quite so fast as Jersey City. Each of the four had added about forty thousand to its numbers. Minneapolis, which ranks with these four in size, though somewhat exceeding them all, had a growth in the first half of the decade that was wholly exceptional. But in the last half it grew not much faster than a number of German cities of similar rank. Neither did Kansas City, nor St. Paul, nor Omaha. Minneapolis had 129,000 in 1885 and 164,700 in 1890. Magdeburg much outdid that record. St. Paul had 111,000 in 1885 and 133,156 in 1890. Düsseldorf, with 95,000 in 1880, had 115,000 in 1885, and 144,680 in 1890—which quite distances St. Paul. Chemnitz, that stirring factory town of Saxony, with 95,000 in 1880, and 110,800 in 1885, had 138,955 in 1890—again distancing St. Paul and its American group.

Hanover, Königsberg, Louisville, Jersey City, and Minneapolis.

Düsseldorf, Chemnitz, St. Paul.

Altona, Hamburg's next-door neighbor, had grown from 91,000 to 143,000 in ten years, while Albany, the capital of New York, beginning at just the same point—91,000 in 1880—had only grown to 95,000. Rochester, New York, had 89,366 inhabitants (about as many as Altona) in 1880, and 133,896 in 1890, while Altona had 143,000. Chemnitz also had fully kept its lead on Rochester, Our prosperous and growing manufacturing city of Providence, from which many

Altona, Albany, Rochester.

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Nuremberg and Providence.

cultivated men and women have gone to visit that "quaint and stationary" old German town, Nuremberg, has probably never reflected, when congratulating itself upon a growth from 104,857 in 1880 to 132,146 in 1890, that "old" Nuremberg, starting with only 99,519 in 1880 — more than 5000 behind Providence — had increased to 142,523 in 1890, more than 10,000 ahead of Providence.

Relative growth in general.

Doubtless the comparison begins to grow tedious; but otherwise one might show Indianapolis, Allegheny, Columbus, Syracuse, Worcester, Toledo, Richmond, New Haven, Paterson, Lowell, Nashville, Scranton, Fall River, and all the rest, how their growth has been matched or perhaps surpassed by that of flourishing commercial and manufacturing towns of like size in Germany — such towns as Elberfeld, Barmen, Stettin, Crefeld, Halle, Braunschweig, Dortmund, Mannheim, Essen, and a dozen more. Some of the specific comparisons I have made might be somewhat affected on one side or the other if every annexation of suburbs were taken into account. But no such reckoning would change the general impression. And if the figures were revised to extend the comparison to the year 1895, the exhibition of swift growth in the German towns would appear still more remarkable.

A comparison of advantages and disadvantages.

When one ventures to suggest that the American cities are meagerly provided with the best modern facilities, and make but a sorry show in comparison with European cities, there comes the unfailing reply that ours are in their infancy, while those of Europe are venerable with age and rich in the accumulations of a long realized maturity. The existence of old churches and castles, and of various monuments and collections illustrating the history of art, has given the impression that the European cities are old. But for the purposes of our discussion they are younger

than their American counterparts. Their citizens are not nearly as rich as those of our cities. They suffer under the disadvantage of loss in productive energy and wealth through the emigration of hundreds of thousands of their best young men after they have reared and educated them. They stagger under such heavy burdens of taxation and compulsory service to maintain the military arm of the general government, that the tax increment which can be spared for municipal purposes comes with pain, and is small compared with the revenues we can raise for local outlay in America, where taxes for national and State purposes are comparatively light. And yet, in the face of disadvantages far greater than any that we can present as excuses, the German cities have grappled with the new municipal problems of the last quarter of a century, and have solved them far more promptly and completely than the American cities have done.

Heavy burdens of European cities.

The physical transformation of these cities has been very remarkable. The ground-plan of the modern city is an essential consideration; and there has been much reconstruction of old-time thoroughfares in the central districts of German cities, while the newer parts have been laid out with care and good judgment. The suburban tendency is the key to recent municipal development everywhere. This tendency demands the distinct recognition of a series of main thoroughfares that shall make easy the movement of population to and from the business center. No such condition of things was recognized fifty years ago. All the German cities are now adjusting their street systems to the demands for quick transit. The usual American system is the simple checkerboard. The German system is a combination of the radial and concentric with the rectangular and

Ground-plans and suburban tendencies.

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parallel; and it needs no argument to show that the combination system is by far the most convenient. Main thoroughfares in the German cities are to-day more conveniently planned and carried through than in most American cities.

German thoroughfares.

Good streets are to the modern town what the circulatory system is to a living organism. It is not necessary in Germany to argue that good roadways are cheap at any cost, and that bad ones are so disastrously expensive that only a very rich country like the United States can afford them. New York has begun to construct good pavements, but it lays them gradually and cautiously; and for the most part the existing pavements are wretched. Berlin adopted asphalt more than twenty years ago, and has been increasing its use year by year, though most of the city is paved with stone blocks. The maintenance of the streets in general is so much better than anything in America that comparisons are humiliating. There is no reason in the nature of things why the streets of Hanover, which are beautifully paved and kept, should be better than those of Jersey City or Newark, which cities are as large as Hanover, and as rich, though their streets are probably the meanest and forlornest in the whole civilized world. The Dresden streets are much superior to those of our one exceptional city, Washington; and those of Hamburg, Munich, Leipsic, and most of the smaller German cities, are far better than those of American cities in general.

Good roadways.

Berlin pavements.

Some American comparisons.

I have mentioned Hanover because it is not in any wise an exceptional German city in the manner and completeness of its modern physical transformation, and because it is one of the many places that travelers usually omit as uninteresting. It is comparable in size with Jersey City, Newark, Louis-

Hanover as an instance.

ville, or Minneapolis. It typifies the spirit of progress and improvement now visible in nearly all the German towns. They are growing fast as railroad and manufacturing cities, and are developing a commendable degree of civic pride. The remaking of the snug, compact little *hauptstädte* (capital towns) of petty German principalities into modern industrial communities is a striking and a noteworthy process. Nearly every important place in Germany has at some time been the seat of government of an ambitious king, or prince, or margrave, or elector. The idea of the greater Germany has been completely triumphant; but these capital towns have gained more than they have lost. For many of them, however, it is now proving fortunate that the ridiculous little potentate had his day. His ambition often led him to preserve extensive private gardens and pleasure-grounds, to erect creditable palaces and public buildings, and to lay out at least a few broad and tree-lined avenues as supports of his dignity. Such public appointments, now becoming municipalized, form valuable features of rapidly extending towns, and conduce greatly to the popular health, comfort, and pleasure. Even where the local potentate and his court survive, an entirely new spirit is shown; and royal grounds, galleries, and avenues are treated as public rather than private possessions.

The new prosperity of old capitals.

In Hanover one is strongly impressed with this transformation of an old seat of government into a new railroad and manufacturing town. The old town remains almost intact, enveloped in a new town covering several times as large an area. A handsome palace has been made over into one of the largest and finest technical colleges in the world—an institution that ministers directly to the practical industrial life of the town. Ducal grounds are used

The modern aspects of Hanover.

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as municipal parks. Street-railway tracks run on splendid old avenues leading out to what were in earlier days the country or suburban residences of ruling families. The old business streets, with quaint, antiquated houses, are now paved with smooth new asphalt. Just outside the town, on almost every side, are the tall stacks of new manufacturing establishments. New business streets have the freshness of an American city, with the advantages of evener and more becoming architecture, and of much better paving and cleansing. The people of Hanover now possess, as a community, many of the advantages that formerly belonged alone to the ruling family and court. They are a thoroughly modernized community. They enjoy admirable school advantages; they have access to public libraries containing several hundred thousand volumes; at their disposal for education or entertainment are picture- and sculpture-galleries, museums, and various other collections.

Opportunities of culture.

The city has magnificent new water-works; it owns fine central slaughter-houses and cattle-markets; has convenient and well-inspected produce-markets; possesses a good modern sewer-system; owns disinfection establishments and epidemic hospitals; has a well-organized system of sanitary administration with inspection corps; is supplied with ordinary hospitals and institutions for the relief of poverty; and, in short, maintains a full complement of the establishments and "plants" that pertain to the well-regulated city of this last decade of the nineteenth century. Its rules and municipal ordinances form a highly instructive body of municipal literature. The new building regulations, as revised in 1888, comprise a valuable code that brings every detail of construction under strict rule and under the surveillance of the authorities. The code of street regulations, and

Municipal appointments.

that which has to do with protection against fire, are in like manner minute and important. Yet Hanover makes no pretensions whatever, and would assert no claim as a model or an exception. It is not rich, and the adaptation of old surviving buildings, grounds, and establishments has not saved any great sum of money, and does not account for the completeness of the existing appointments. Hanover has been modernized through the intelligent and wise application of business principles and methods to the conduct of municipal housekeeping.

A triumph of good government.

Having recognized the significance and the value of the suburban tendency, the German cities are now undertaking to control the forms of their expansion, and to prevent errors that would require costly future remedies. Annexations of outlying territory are the order of the day. Since 1870 most of the German cities have widened their bounds — some of them very materially. Munich has annexed extensive suburbs, notably in 1890, with a further addition in 1892; Leipsic in 1889, 1890, and 1891 brought in large bodies of suburban population, and annexed territory which makes it three and a half times as large as it was before 1889. Dresden in 1892 and 1893 made material annexations. Cologne, which was one of the most congested and constricted of the German cities, is now, by virtue of its great acquisitions of 1888, much the largest of them all. Berlin, Munich, Hamburg, and Frankfort are now of about equal area, averaging somewhere near 7000 hectares (the hectare being about two and one half acres), or from twenty-five to thirty square miles. Berlin will make very large acquisitions in the early future, definite steps having already been taken to annex a wide suburban zone. Cologne's new boundaries include 11,000 hectares, and embrace much garden and farming land.

Annexation of suburbs.

Munich, Leipsic, Dresden.

Berlin's proposed extensions.

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Cologne's policy.

But the municipality will be enabled — for purposes of the extension of the street, drainage, and transit systems, and the water and gas supplies, for park purposes, and for the regulation of building — to control from the outset an area surely destined to contain a large population. Magdeburg nearly doubled its area in 1886 and 1887. Hanover in 1891 and 1892 extended its limits from seven square miles to about sixteen; and Altona, Chemnitz, Bremen, Karlsruhe, and other towns, have in recent years widened their precincts. The movement has, however, only fairly begun; and the next ten years will almost certainly witness a development of superficies, and a distribution of now congested population-masses, that will quite eclipse the achievements of the period 1870–90. The rapid growth of these German cities has been attended, of course, with much speculative building, and the laying out of divers new quarters by private companies. Berlin has been built up in this fashion, and Hamburg, Munich, Leipsic, Dresden, and the other large towns, all afford abundant examples. But the municipal authorities regulate in the severest fashion the arrangement and width of the new streets thus formed, require the best of paving, demand all that could be desired as to sewers, and govern the character of the buildings as to materials, height, street-lining, and general appearance. Thus the greed of speculators is not allowed to mar the harmonious development of the city, or to endanger its future health by bad construction and inferior sanitary arrangements.

Magdeburg, Hanover, and other towns.

Public control of private building.

It is worth while to note, as regards the forms of German cities, that the municipal authorities fully recognize the vital importance of railways to a town's commercial prosperity, and understand that adequate and convenient terminal facilities both for passengers

Accommodation for railways.

and for goods ought to be as fully considered by the city government as the provision of proper thoroughfares for ordinary street-traffic. One of the most serious mistakes that our American cities have made is their failure to provide suitably for the entrance and exit of railroads, and for the central station and yard room that railway traffic requires. Even our newer cities have neglected this matter with a stupidity that is almost unaccountable in view of the fact that nowadays the one question of railway terminals often decides the commercial fate of a town. The European State railway systems are more fortunate than the English and American private systems in finding the towns disposed to grant the necessary facilities for the transaction of their business. Leipsic, for instance, has become a great railway center, and one is impressed with the excellent judgment shown in the location of the extensive railroad yards, and of the factories, which lie on the outskirts of the town and have perfectly convenient shipping facilities. Stuttgart, also, affords an excellent instance of admirable central railway facilities. Terminal arrangements at Berlin are magnificent; and the whole movement of traffic, both freight and passenger, is facilitated to a remarkable degree by the *stadtbahn* or municipal railroad, crossing the city from east to west, and the *ringbahn*, an encircling railway operated in conjunction with the stadtbahn. These connect with all the lines that come to Berlin, and assist in the collection, distribution, and transfer of freightage.

An essential concern.

Terminals at Leipsic.

At Stuttgart.

At Berlin.

Furthermore, it is made a municipal function in Germany to utilize to the highest advantage any water-ways that a city may possess. Hamburg is the most noteworthy instance. It lies at the head of tidal water, on the estuary of the Elbe, and it has had the enterprise, at vast expense, within the past decade

Utilizing water-ways.

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Hamburg's harbor and docks.

to create the finest harbor and dock facilities in the whole world. The docks are provided with a network of railway tracks and splendid public storage-houses, and thus the highways for the accommodation of the larger traffic of the ocean-going ships are as perfect as those for ordinary street-traffic. And the city is directly or indirectly a very great gainer from these splendid public works. At Berlin, the most casual observer can hardly fail to notice the marvelous use that is made for purposes of commercial navigation of the narrow river Spree. It has been well dredged out, is held in a controllable channel by magnificent stone embankments extending for a number of miles on both sides of the river, and has, below the high quays, broad and convenient stone landings all along the water-edge. The quantity of freight barged at cheap rates from point to point in the city by means of the Spree is enormous; and the city streets are thus greatly relieved. Moreover, the Spree connects with a system of canals penetrating the country in every direction, and carrying enormous quantities of heavy ware such as building materials. Dresden in a similar manner derives large service from the Elbe; and the German cities in general have not spared expenditure to make their rivers or other navigable water-courses a well-utilized part of the arrangements for the convenient passage of persons and traffic.

Berlin's utilization of the Spree.

Dresden and the Elbe.

Although the framework and general structure of the municipal house are not of absolutely vital consequence to good housekeeping, they have a very considerable importance. It happens that the Germans care less than the French for a modern and regular system — one that shall conform to geometrical rules and harmonize with a philosophical ideal. In the United States the reformers have doubtless at times

The structure of municipal government.

lost sight of the aims and objects of government in striving after good government as an end in itself. Their attention has been devoted to the structure and mechanism, and, so far as the cities are concerned, they keep changing it perpetually. They are forever overhauling, repairing, or reconstructing the house, without seeming to have many attractive or inspiring uses for which they are eager to make the house ready. The Germans of our generation, on the other hand, have taken their old framework of city government as they found it, and have proceeded to use it for new and wonderful purposes, altering it somewhat from time to time, but not allowing its defects to paralyze the varied activities of the household.

In Germany, a means rather than an end.

The different States of Germany—Prussia, Saxony, Bavaria, Würtemberg, Baden, and the rest—have their distinct municipal systems, prescribed by general law. Variations of detail are numerous and marked; yet the systems of the principal States are essentially similar. The Prussian laws providing for municipal government are a part of the great administrative scheme established in the legislation of Stein and Hardenberg early in the century. Many changes have been made, but the municipal constitutions of Prussia remain in their chief characteristics what the law of 1808 made them. Through the previous century it had been the Prussian policy to sink the independence and individuality of the *gemeinden*, the municipalities, in the absolutism of the State; and to go so far even as to treat old municipal property as belonging to the State at large. The towns had practically no freedom in the management of their own local establishments and institutions.

The general laws.

Stein's Prussian reforms of 1808.

But all this was changed in the legislation of 1808. As in the French municipal laws of 1789–90, the municipalities were recognized as ancient units of gov-

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ernment, organic entities, with their own properties and functions, and with the right of entire self-government within the sphere of their strictly local and neighborhood concerns. They were given elective assemblies, or councils, and an executive body, or magistracy, composed of a burgomaster and a number of associated magistrates; — the burgomaster (mayor) and his executive corps (*magistrats-mitglieder*) being chosen by the popularly elected council (*gemeinderath*), and given the complete charge of administrative work. The system was from time to time extended to the provinces that Prussia absorbed. In its general principles, moreover, it was incorporated in the laws of the other kingdoms and principalities that with Prussia now make up the German empire.

The system outlined.

In Prussia, as in England, local self-government on the plan of elective councils was granted to the large towns as municipal corporations long before anything similar was devised either for rural districts or for provinces. But in the period 1872–84 the administrative system of Prussia was reconstructed. There is a new and comparatively regular series of provinces, districts, and "circles," which divisions are analogous to French departments, arrondissements, and cantons. In each division there are administrative officers representing the central government and executing the national laws, while there are also elective councils with their standing committees or magistracies to attend to the strictly local affairs of the provinces, districts, and circles in accordance with the now accepted doctrines of self-government. The circle consists of a group of rural hamlets and villages; but every town of 25,000 people or more is distinct and constitutes in itself an "urban circle." Throughout the entire system,— which is far more complicated in its details than the French,— there is manifested the de-

Reorganization of local government in Prussia.

termination to stimulate local progress and to bring the best ability everywhere into some form of participation in the work of government.[1]

It would not have been possible in the Germany of Stein and of Frederick William III. to establish representative institutions upon a basis of popular equality. The Prussian system emphasized the property qualification; and that system remains to-day. The voters are those who pay certain kinds of taxes above a minimum amount, and this restriction excludes perhaps ten or fifteen per cent. of the men of voting age. The electoral system is somewhat complicated. A city — Berlin, for instance — is laid off in a number of electoral districts. The voters are listed in the order of the sums they pay for taxes, with the heaviest tax-payer heading the list. They are then divided into three classes, each of which has paid one third of the aggregate amount. Thus, the first class will contain a group of very heavy tax-payers, the second will be made up of a much larger number of men of moderate fortune and income, and the third class will comprise the great mass of workingmen and small tax-payers. Each class in a given district elects a member of the gemeinderath, or town council.

Three-class electoral system.

In large parts of the German empire the class system is not maintained. The Berlin system is, however, the most prevalently typical for Germany at large. At a recent Berlin election (1893) held in one third of the districts, for the renewal of one third of the council, there were registered as qualified voters 111,637 men, of whom 2045 were in the first class, 13,049 in the second, and 96,543 in the third.

A Berlin election.

[1] An excellent account of the system of provincial and local government in Prussia, by Professor F. J. Goodnow, was published in the "Political Science Quarterly" for December, 1889, and March, 1890.

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It happened that of these classes 976, 4858, and 25,596 actually appeared at the polls — considerably less than one third of those empowered to vote. The first-class voters participated in the highest proportion. But each class chooses its third of the municipal council, regardless of the force it musters on election day. An extreme instance of the preponderance that this system gives to wealth is afforded by the manufacturing city of Essen, where in a population approaching 100,000 there is a mere handful of persons who pay one third of all the taxes, and are therefore empowered to designate one third of the councilors. The Krupp gun-works form the great industry of Essen, and at a recent municipal election *one* voter appeared for the first class and counted for quite as much as the nearly two thousand men who appeared for the third class. The statistics of a still later election at Essen show that 4 men belonged to the first class, 353 to the second, and 12,197 to the third, and that 2, 243, and 5367 actually voted in the three classes. In the cities of Saxony, Bavaria, and Würtemberg, the three-class system is not in vogue; but there are considerable restrictions upon the franchise.

Essen as an extreme instance.

So far as the voters are concerned,—whether in Berlin, Breslau, Cologne, Magdeburg, and the other cities where the class system remains, or in Stuttgart, Munich, Leipsic, or in any of the cities where there are no discriminations introduced among the enfranchised,—their one task is the selection of a good municipal council. Everything in the life of the gemeinde revolves about this one central body. It finds the burgomaster, designates his expert associates of the magisterial coterie, supplies the means for carrying on the city government, and represents in its own enlightenment, ability, and aspirations the standard

The municipal council as the central fact.

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and the character of the community's progress. It is to this body that one must go to discover the secret of the consistency and continuity of German municipal policy. Much of the detail of the organization and method of German city government would only appear tedious and cumbersome if an attempt were made to describe it all. But I must beg permission to make as emphatic as possible this fundamental point, that such city government has its focus in the elected municipal council. However peculiar in a hundred details the German system may be, it is like the English and the French systems in the main fact that the voters elect a representative common council, of considerable size and sitting in one chamber, which has in its hands for exercise directly or indirectly the whole authority that exists in the municipality. It is a body large enough to contain men of various opinions, and it acts openly, with full responsibility.

This in common with English and French systems.

Stability in the German municipal councils is secured by partial renewal. Thus the councilors of Berlin and the Prussian cities are elected for six years, and one third of the seats are vacated and refilled every two years. In Berlin there are forty-two electoral districts, and these are arranged in three groups of fourteen each. Each group elects its councilors in its turn. Thus group I. chose its forty-two councilors in 1889, group II. had its turn in 1891, and group III. renewed its representation in 1893. Each district elects three councilors, corresponding to the three classes of voters, and thus each group contributes forty-two to a total elective council of 126 members. Taking the German cities in general, the most usual period for which councilors are elected is six years, with the plan of renewal in three instalments. But Strassburg and Metz retain the French

Six-year terms, renewal by thirds.

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system of entire renewal at each election, their period being five years. Munich, Nuremberg, and the Bavarian towns, on the other hand, give their councilors nine-year terms, and renew one third of the body every three years. Dresden, Chemnitz, and other Saxon towns are like the English municipalities in giving councilors three-year terms with annual renewals of one third the membership; and Stuttgart renews one half of its council every year. But the six-year term is most prevalent, and most characteristic of the German system.

Nine-year terms in Bavaria.

Three-year plan in Saxony.

European cities all the way from Scotland to Hungary would seem to have arrived by somewhat independent processes at similar conclusions as to the advantageous size of the popular municipal body. Thus the great capitals have found a body of a hundred members, more or less, a convenient size. The London county council has 138 members, the Berlin council 126, the Paris council 80 with prospect of enlargement to more than 100, and the new Vienna council has 138. Large commercial towns, or minor capitals, find a body of from 40 to 60 men the most satisfactory. Such is the size of the councils of the great British towns, and of the principal French and Italian cities. Making comparison with Germany, we find that Munich and Leipsic have councils of 60 members, Dresden one of 72, Breslau a body of about 100, Cologne one of 45, Frankfort one of 57, Magdeburg of 72, Chemnitz of 48, Strassburg of 36, Altona of 35, and Stuttgart of only 25. The average for all German cities, taking a list of forty of the most important ones, would be a municipal council of about fifty members. This is not a matter of minor detail, nor do I adduce it from a mere fondness for the statistical. In constituting our American State legis-

Size of councils.

General European conclusions.

In the German cities.

A matter of practical importance.

latures we have shown some grasp of the question how large to make the representative bodies; but in forming our American city governments we have been utterly at sea, and have produced results of the most whimsical and bewildering variety. European conclusions need not be accepted as a guide, but they may on the other hand be usefully noted for purposes of comparison.

High character of municipal councilors.

Municipal councilors in Germany are, as a rule, very excellent citizens. It is considered a high honor to be elected to the council. Membership is a title of dignity that merchants, professional men, and scholars are usually eager to hold. No salaries are paid to the councilors, and a penalty is attached to refusal to serve if elected. The sentiment toward these positions is much the same in Germany as in Great Britain, though stronger with men of high education in the German than in the British towns. The reëlection of good councilors term after term is common in both countries. It would be difficult to estimate fairly the influence of the class system in Prussia upon the character of city councils as regards their conservatism, intelligence, and business ability. Undoubtedly the recent growth of the social democracy would have a sharper influence upon the city councils if the class system were abolished, and if the municipal franchise were made identical with the simple manhood suffrage that exists for purposes of representation in the imperial legislature, the Reichstag. Thus in France, with universal suffrage, the socialists have of late been entering municipal politics with much zeal, in pursuance of the plan of an increased communal activity for the benefit of the masses. Already the German cities would appear from the viewpoint of other countries to be far advanced in socialistic undertakings; yet it must

Influence of the class system.

Socialism and the suffrage.

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A thrifty burgher collectivism.

not be forgotten that the municipal ideals of a thrifty burgher collectivism and those of the social democracy in German cities, may tend as far asunder as those of the bourgeoisie and the proletariate in France. As yet the German city governments are in the hands of the educated and thrifty classes. What social overturning will some day give these splendid business machines into the keeping of the working-classes is a speculative topic that may be suggested here, but need not be discussed.

Proprietors in the councils.

The characteristics, to some extent, of German city councils may be inferred from the number of real-estate proprietors in them. It is common to require that a certain proportion at least shall be house-owners. In Berlin about three fourths of the councilors are proprietors, and in Breslau nearly as many. In Frankfort, Hanover, Düsseldorf, Nuremberg, and many of the smaller cities, the house-owners are eighty or ninety per cent. of the total number of councilors. But in the Saxon cities, as Leipsic, Dresden, and Chemnitz, and in a few others elsewhere, existing laws require that one half the councilors shall be house-owners, and that one half shall not be. This provision is supposed to protect property interests in a group of cities which, as I have already explained, do not give any excess of representation to propertied voters under a class system. The great mass of citizens are of course renters of apartments in "flat"- or tenement-houses, and they are assured a full half of the municipal council that has to adjust taxation, and must of necessity determine questions in which the interests of the occupying and the owning classes would seem to differ. The presence of men eminent for scientific, economic, or other expert knowledge is another of the characteristics of the German councils. Thus the Berlin body, as

In Saxony an equal division.

Reasons for this requirement.

Scientists and specialists in the councils.

those of other university cities, contains more than one learned professor whose influence is strongly felt in some important line of policy or department of administration. The councils form themselves into standing committees for working purposes, and choose one of their own members as presiding officer, and another as his deputy — although in Cologne, Düsseldorf, Elberfeld, and some other places, the chief burgomaster is brought in as the chairman of the council.

Organization of councils.

In addition to the magistracy and the council, there is in Berlin a body of about seventy-five so-called "citizen deputies," who are selected by the council for their general fitness to serve as associates on committees charged with the oversight of various municipal interests, such as parks, schools, the care of the poor, and the sanitary services. They have no authority to vote in the council, but they illustrate, at the center of administration, the excellent practice, which is followed throughout the entire ramification of German city government, of enlisting the coöperation of unofficial citizens in managing the ordinary concerns of the community.

The "citizen deputies."

Unofficial coöperation.

The burgomaster and magistrates are the most highly trained experts that a German city can secure. The burgomaster is an expert in the general art of municipal administration. Associated with him in the magisterial council are experts in law, experts in finance, experts in education to administer the schools, experts in engineering to oversee public works of every character, experts in sanitary science, experts in public charity, experts in forestry and park management, experts in the technical and business management of water and gas supplies, and so on. The analogy would be far from perfect, but it would answer roughly to compare the governmental structure

Burgomaster and magistrates.

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Compared with organization of a railway company.

of a German city with that of a railway corporation, in which the board of directors, chosen by the stockholders, appoint a general superintendent or manager, a general passenger agent, a general freight agent, a chief legal officer, a chief engineer, a superintendent of motive power, and other general officers, and leave to these highly salaried experts, promoted from inferior places or drawn from the service of various other transportation companies, almost the entire management and operation of the road. The shareholders represent the voters of Berlin, let us say; the board of directors are the municipal council; the general superintendent is the chief burgomaster; and the general officers at the head of departments are the magistrates.

The magistrates are professional experts.

The *magistratsrath* or *stadtrath* of a German city is, then, a body of distinguished and honored, highly paid, professional, expert employees, and not a body of citizen-representatives; although experienced members of the body of citizen-representatives may be — and not infrequently are — promoted to membership in the magistratsrath. The professional civil service is a vastly greater and better-established field of employment in Germany than in England or America, and it is particularly difficult for an American to appreciate its position and significance. The mayor of an American city is usually some well-known citizen, called temporarily from private life to occupy the most authoritative place in the corporation. The burgomaster of a German city is a civil servant — the permanent head of a permanent body of trained officials. The difference between the two is somewhat like that between our secretary of war and the general commanding the army. I have alluded to possible changes in the spirit and the objects of German city governments when the workingmen shall

Burgomaster compared with American mayor.

have become dominant at the polls. But I do not believe that there is any likelihood whatsoever of a change in what we may call the method, as distinguished from the motive, of administration. That is to say, whatever may be the political or class complexion of the citizens' representative council, that body will continue to employ experts on the principle of a permanent civil service to carry out its plans. We may deprecate German officialism as much as we like; but the Germans will not cease to manage the business affairs of their municipal corporations through the employment of a trained, professional service, until American railway corporations cease to seek the best technical and expert talent, whether in administration or in engineering, to carry on their enterprises.

Methods and motives.

It may be useful to note some points of difference and resemblance between the German, English, and French systems of executive government in cities. The English have a single, central elective council, to which the councilors themselves add aldermen, in the proportion of one sixth of their own number. These aldermen are, almost always, ordinary councilors who have served for several terms, and have become especially useful on account of their experience. They have no different functions from councilors, but hold their terms for six instead of three years, and are very commonly made chairmen of standing committees. The mayor is designated by the council for one year, and he is usually an alderman, his duty being simply that of presiding officer and titular head of the corporation. He serves on committees like other members of the council, and when his "year in the chair" is at an end, he resumes his place on the floor. There is a standing committee for each important branch of the municipal service, and this committee

Comparison of German, English, and French systems.

Résumé of British system.

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selects (subject to confirmation by the full council) a permanent, expert chief of the department, who organizes it in detail, and superintends its operation. Thus, besides a permanent staff of high general officials, such as the town clerk, the borough engineer, and the medical health officer, there will be a superintendent of water supply, a chief of the fire department, a chief sanitary officer, a chief of police, and various others. These experts will have been secured upon their pure merits, often from distant cities. The system works very satisfactorily. The expert chiefs are in constant touch with the chairmen of their supervising council committees, and always attend committee meetings. The whole municipal service is held in coördination through reports made to the full council by the committees. The council thus meets very frequently, and a large amount of labor is entailed upon the chairmen of committees.

Résumé of the French system.

The French system is quite different. The elected municipal council designate the mayor from their own number, and also appoint from their own body a group of their most experienced members to serve as his "adjuncts," and to form with him a *corps executif*. The mayor, in turn, assigns to each of these adjuncts the supervision of a department of the municipal service. A number of ordinary members of the council are then grouped around each such chairman, as his consulting committee, but the mayor is the controlling spirit in the total executive administration. Under him and his executive corps the expert civil service is organized; and while the full council holds comparatively few stated meetings in the year, the executive corps is in very frequent session, and the departmental business is thus kept in harmonious relationship.

Now the German magistratsrath is the glorification

The German executive.

of the expert chiefs of departments that one finds in the English system. It may be regarded as a fusing into one supreme executive group of these professional and salaried experts and the level-headed old chairmen of council committees. This statement will be the better understood when the structure of the magistratsrath is still further analyzed. The Berlin magistracy is composed of thirty-four members, including the chief burgomaster (*oberbürgermeister*) and his substitute and next in authority, the second burgomaster. Of this body, seventeen are salaried and are appointed for twelve-year terms, and seventeen are unpaid, and are chosen for six-year terms. The salaried men, including the mayor and deputy-mayor, are selected for their expert qualifications exactly as a board of railway directors would make up its staff of general officers. They come from the civil service of other German cities, where they have made a record, or from the departments of the royal Prussian service, from which the higher salaries paid by the city tempt the best and most ambitious men. The paid element in the magistracy includes legal officers, the city treasurer, architects, civil engineers, school administrators, and other experts. It is perfectly understood that these men, including the mayor, will be reappointed at the end of their terms; and their tenure is practically for life, unless they forfeit their positions by their own misconduct. The seventeen unpaid magistrates may be said to represent the highest development of non-professional experience and skill in municipal affairs. They have some resemblance to the aldermanic element in the English councils, or to the chairmen of English council committees. They have in most cases served efficiently as members of the elected municipal council, and are citizens with sufficient leisure and means to devote their time to the service of the

Analysis of Berlin magistracy.

Sources whence drawn.

Permanency of tenure.

The unpaid members.

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city, from the motive of public spirit mingled with that of satisfaction in the honor of high position. For these posts are held in the highest esteem; and the men appointed to them are often the equals of their salaried associates in administrative or even in scientific and technical qualifications. These unpaid places are also practically permanent, the incumbents being usually reappointed, term after term. Sometimes vacancies in the salaried places are filled by the transfer of men from the unsalaried element of the magistracy. Naturally the most confining and arduous duties of administration are usually assigned to the paid magistrates, while the unpaid men serve in capacities more advisory than severely executive; yet it often happens that the unpaid members assume full charge of very important departments of the public service. It is important to bear in mind that the distinguished citizens appointed as unpaid magistrates must serve for at least half their six-year term, or else suffer serious pains, penalties, and disabilities.

Position and duties.

Penalties for refusal to serve.

The mayor or head of the municipality — in some cities called the oberbürgermeister and in some simply the bürgermeister — is the general manager of the whole mechanism of administration, and usually the guiding spirit as well in the economic policies of the municipality. He may feel that success in the management of a smaller city will perhaps be rewarded by the prize of the mayoralty of a greater one. Thus the late Dr. Forckenbeck, mayor of Berlin, had made his reputation as mayor of Breslau, and was called to fill a vacancy in the same position at the capital. On his death in 1892, the very successful mayor of Dantzic was prominently mentioned for the vacant post; but Dr. Zelle of the Berlin magistracy was promoted. Many cities appoint their mayors for life, and some make a trial appointment for a term of years and then

Burgomasters and their functions.

A case of promotion.

grant a life lease. Thus the mayors of Munich, Leipsic, Dresden, Hanover, Stuttgart, Chemnitz, and various smaller cities, are life incumbents; while those of Berlin, Breslau, Cologne, Magdeburg, Frankfort, Königsberg, Düsseldorf, and numerous other places, are appointed for twelve-year terms. Strassburg, Metz, and the Alsace-Lorraine towns, on the other hand, grant only five-year terms, following French rather than German modes of city organization, and keeping the French system of 1870.

Life appointments.

Elsewhere twelve years.

The tenure of the paid magistrates in general follows that of the mayors, and the cities which give life appointments to the chief of the municipality commonly give them also to the expert professional element among his associates, while limiting the unpaid magistrates to terms corresponding with those of the popularly elected councilors. Duties are so well distributed among the magistrates that there results the highest type of executive efficiency, and the least possible friction or waste of energy. New departments of administration may either be assigned to the portfolios of existing magistrates, or may be provided for by the appointment of additional members. Thus the magistratsrath is sufficiently flexible to respond to the changing circumstances of a city, and the presence of its unsalaried citizen members keeps it always sufficiently in touch with the spirit of the community. Magistrates and councilors serve together on standing committees. It should further be said that in the details of administration the magistrates have the coöperation in various ways, to which further allusion will be made, of numerous unofficial citizens serving in a voluntary or honorary capacity on countless sub-committees.

Tenure of paid magistrates.

Distribution of tasks.

Magistrates and councilors serve together on committees.

Nearly all the cities in Germany, great and small, maintain the plan of a magisterial council composed

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Paid and unpaid magistrates in various cities.

of paid and unpaid members. In Dresden 14 are paid and 18 are unpaid. The 14 have been very largely drawn from the service of other and smaller cities, while the 18 have been promoted to the magistracy after valuable service in the elected council. Leipsic has 12 paid and 15 unpaid magistrates, Munich 16 and 20 respectively, Breslau 11 and 13, Frankfort 9 and 8, Hanover 8 and 9, Nuremberg 9 and 17, Chemnitz 9 and 16. In many of the smaller cities the unpaid members predominate largely. Stuttgart pays its mayor alone, and appoints all its other magistrates from its own public-spirited citizens, who give their services freely. But it is a marked exception to the rule, its magistrates having in fact the character of the French "adjuncts."

The Stuttgart plan.

Why salaries are small.

Civil-service salaries in general are very small in Germany, for the reasons that positions are permanent, pensions are given to retiring officials, and such posts are considered socially desirable and are much sought after. Comparatively, therefore, the pay of burgomasters and magistrates is considered very large by the German official class. The mayor of Berlin receives 30,000 marks ($7500), and the salaries of other German mayors range from that figure down to about 10,000 marks ($2500). The deputy-burgomaster has the next highest salary — 18,000 marks in Berlin, and from 6000 to 12,000 in other cities. The average pay of the Berlin magistrates is about 12,500 marks, while, if one should average a hundred or more German towns, great and small, the current yearly pay of this class of expert officials would be found to be about 6000 marks ($1500). Such remuneration is tempting enough to give the cities an abundant supply of trained talent from the universities and technical schools, and from the various lines of State service. Under the mayor and magistrates are

The pay of mayors.

Magistrates' salaries.

the numerous officials, of all grades and ranks, who constitute the membership of the municipal civil service, and who are trained men in their respective departments.

Police authority.

The police authority in Germany is retained as a function of the State, and is usually exercised under the supervision of administrative officers who represent the higher authority rather than the purely local interests. The cost of the police in large cities is as a rule borne chiefly by the State, although in some places it is shared by the municipalities. In Berlin the city authorities maintain a force of night watchmen; but the general police organization belongs to the royal Prussian service. Opinion in Germany is divided upon the question whether the ordinary police administration should be made over to the municipal governments or separately maintained by the State. Many active friends of the municipal régime prefer that the police system should remain on a quasi-military footing, under control of the political power. In practice it appears an easy matter for the municipal and police authorities to keep a good understanding and work together harmoniously. It is the German fashion to exercise an extremely minute police oversight. The entire population is enrolled upon the police registers, and the comings and goings are observed and recorded. In many German cities the annual directories are published and sold by the police authorities, their central office necessarily possessing all the names and facts required for the compilation of a directory. Private guests from outside the city, as well as hotel arrivals, must be reported at police headquarters, with an amount of information of a strictly personal nature that American or English travelers always find amusing.

Berlin watchmen.

The question of full control.

Police directories.

Such, then, is the framework and structure of the

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German municipality. It meets the demands made upon it. The German mind has a clear conception of the municipality as an organization for business and social ends, and of the municipal government as a mechanism for the accomplishment of those ends. "Officialism," so-called, expert and highly organized, results inevitably. I am not advocating the introduction of the German type of officialism into our American city life. And, indeed, I have no desire in these chapters to hold any argument with those who do not believe in the development, for America, of a permanent, skilled, non-political body of city officials. My present object is to make comparison easier. For my own part, I see no possible reason why, having city business to do, we should be unwilling to have it performed in as business-like a manner as we should demand in the conduct of a private enterprise. Nor do I see how an acceptance of the idea that the municipal corporation exists for the conduct of a series of business and social enterprises can comport with the rejection of the idea of a permanent, expert body of administrators,— that is to say, a somewhat highly developed officialism. However, it is to be remembered that in Germany the perfunctory tendencies of officialism are much diminished by the plan of enlisting the services of thousands of non-official citizens in the oversight of the schools, the distribution of charitable relief, and other municipal undertakings, together with the custom of placing the ablest and wisest citizens in the town council or in the magistracy.

Officialism in German cities.

Relieved by presence of ordinary citizens.

## CHAPTER VI

## MUNICIPAL FUNCTIONS IN GERMANY

THE practical management of German cities proceeds in harmony with the German conception of the municipality as a social organism. Such a conception has metaphysical aspects; but with theories and philosophies we need not concern ourselves for present purposes. It is enough for us to understand that in Germany the community, organized centrally and officially, is a far more positive factor in the life of the family or the individual than in America. The German municipal government is not a thing apart, but is vitally identified with every concern of the municipality; and the municipality is the aggregation of human beings and human interests included within the territorial boundaries that fix the community's area and jurisdiction. There are, in the German conception of city government, no limits whatever to the municipal functions. It is the business of the municipality to promote in every feasible way its own welfare and the welfare of its citizens. This conception must be carefully distinguished from socialism, with which it is not necessarily in harmony.

The German conception.

No limits to municipal functions.

A concrete illustration will perhaps help to make the difference clear. In 1893 the municipal government of Stuttgart decided that the city should construct, own, and operate electric-lighting works. An investigating committee had reported in favor of giv-

An illustration from Stuttgart.

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ing a franchise for a term of years to a private company. The question was decided adversely to the committee's report by a vote of 13 to 12 in the council of magistrates. It was purely a question of business judgment. Socialism would have demanded municipal ownership and operation because socialism is at war with private capital. But the Stuttgart council was dealing with a question of practical finance, on behalf of the community. Half of the council firmly held that for ten years or more, in the developing and experimental stages of electricity in Stuttgart,— the new illuminant not being as yet an article of common necessity and demand,— it would be a better business policy to allow a private company to establish the lighting plant, the city carefully reserving the right, after a short period, to supersede the private company on reasonable terms of purchase. Twelve men out of twenty-five adhered to this view to the end. If the question had presented itself singly, on its sole merits, a decisive majority would have favored the plan of private ownership.

Not a question of socialism.

But let me explain the circumstances which secured the contrary decision. Stuttgart was one of the very few German cities which had not made the manufacture and sale of gas a municipal monopoly. In the early future, however, as was fully agreed, the municipal council was to buy out the existing gas company and go into the business. Gas is an article of common necessity; it is in its nature an article that is subject to monopoly control; for street purposes the municipality was already a very large consumer; the gas business is beyond the experimental stages; in Germany it has been demonstrably profitable for cities to make the gas-supply a municipal monopoly. Stuttgart, therefore, had already decided to "municipalize" the gas-works at the end of the franchise soon to expire.

Why Stuttgart municipalized electricity.

Municipal gas had been decided upon.

But to charter a private company to control electric-lighting just as the city was about to assume gas-lighting as a public monopoly, might involve rivalries that would be embarrassing and vexatious. The fact of having the gas monopoly would make it more likely that the city could manage electrical works in conjunction without much financial risk or danger. Obviously, there was considerable force in this argument. And there was still another consideration in favor of a municipal electrical monopoly. The Street Railway Company of Stuttgart had for some time desired permission to change its motive-power from horses to electricity, with the overhead-trolley system. Stuttgart is not a large city, and the objection to the trolley on the score of danger was not very well founded. The company was willing to become a customer of the municipal electric power and lighting plant, at a fair price that was agreed upon, for all the electricity it should need; and the assurance of this large and regular patronage would lessen the speculative risk involved in entering upon the business of electrical supply as a municipal undertaking.

A large customer ready.

So much for the facts; a word as to their bearing upon the German conception of municipal functions. So far as I am aware, the theories of socialism did not materially influence either group in the Stuttgart council. The inquirer who has been led to suppose that he will find in the German cities a consistent, highly-developed collectivism, carried into practice in the spirit of opposition to private initiative, will hardly be able to find all that he expected. He will certainly find a great many interesting and successful instances of municipal activity in fields that are abandoned almost wholly to private enterprise in our American cities. But he would scarcely be able to report that he found these things done on *doctrinaire* grounds.

Spirit of collectivism in Germany.

CHAP. VI. The municipality holds itself deeply and supremely responsible for its own welfare. Half of the Stuttgart council thought that the welfare of the community, considered as an organic whole, would be better and more economically served, so far as the introduction of applied electricity is concerned, if a private company were authorized to undertake the business, under municipal regulation and oversight. Is it not plain that with this spirit and with this conception of the municipal responsibility it would not have mattered seriously which way the question was decided? No councilors were accused of a corrupt or improper zeal for any private company that was seeking a franchise. If a franchise had been granted, it would have been given on strict business principles. The municipality would have dominated the question of electrical supply, in either case. The citizens would not have been thrown upon the mercy of a private company exercising a monopoly control; for the municipality itself, acting steadily and constantly through its official organs, would have stood between the citizens and the supply company, regulating and controlling in the common interest.

Nothing vital in the issue.

Municipal oversight in either case.

Stuttgart has been rather a laggard than a pioneer among German cities in the matter of productive municipal enterprises, and it is by mere chance that I have adduced it for purposes of illustration. We may, however, find it worth while to dwell a moment longer at the pleasant capital of Würtemberg. To assume the gas-supply, and to enter upon the monopoly control of electric light and power, will mark a long step in the local development of the municipal business functions. In due course, the Street Railway Company's franchise will expire. Stuttgart's municipal plant will have furnished the supply of electrical power, and passenger transit in German cities

Future of transit system.

will have attained an importance far greater than it now possesses. We shall then see the Stuttgart council investigating with patient care and scientific skill the experience of other cities in the management of street-railways; and we need not be surprised if the decision should be in favor of municipal ownership and direct operation. This further step would only be taken after the most mature preparation, and upon the full assurance that it would be a thrifty, solid business investment, and that the welfare of the municipal organism would be promoted. Next, may we not expect to see something like a municipal monopoly of the fuel-supply? With the progress of electricity as an illuminant, gas is likely to be used more and more as a fuel. The city will already be supplying a certain number of gas-motors and gas-stoves; and the very logic of its position, as monopolist in the domain of gas and electricity, will surely—with the inevitable triumph everywhere of the idea of an urban distribution of heat or fuel, or both, from central reservoirs—lead the conservative Stuttgart municipality into the practical business of supplying another common necessity.

A municipal fuel-supply.

If any one chooses to call this sort of thing a plunge into socialism, it would probably be idle and profitless to quarrel with his use of a much abused word. The Germans would consider it nothing else than a thrifty and progressive municipal housekeeping. It involves no new principles; for everything was already involved, potentially, in the German conception of the municipality's full and unlimited responsibility for the general welfare of the community. If German experience showed that the various common services that we call natural monopolies of supply could be conducted by private persons in a manner more advantageous to the community, there would soon be

This does not mean socialism.

A mere question of business expediency.

CHAP. VI. an end of municipal management; but the municipal responsibility would be undiminished, and the municipality would remain what it now is,— a great, positive, dominating factor in the life of the citizens,— an organic entity. Conservative Stuttgart a good while ago assumed the ownership and control of the water-supply, and conducts the business both for the health of the people and also for substantial profits to lessen the direct taxes. It also manages quite elaborately as a municipal monopoly the removal of night-soil and domestic refuse, turning the nitrogenous waste into a fertilizer; and this undertaking is not only self-supporting, but productive of an attractive net income. Stuttgart has not found out how to make street-sweeping and garbage-disposal a source of clear profit, but it manages fairly well to secure public and domestic cleanliness; and by keen business management and a perfect readiness to turn much or all of the work over to private contractors when that method appears most economical, the best results are attained at the least cost to the community. The Stuttgart municipal cemeteries are conducted at a moderate net profit. In a limited sense, the very parks are a source of income. That is to say, the whole acreage of municipal pleasure-grounds, hospital-grounds, school-grounds, and other areas containing trees, is for certain purposes put under control of a forestry department of the city government; and this department, by a judicious and non-destructive harvesting of the timber resources of the municipal domain, is able to keep up paths and lawns, to pay all its own salaries and expenses, and to turn over as net profits fifty per cent. of the gross revenue from the sale of timber and firewood. I have mentioned these matters as minor instances of the characteristic thrift of a German city government. I have never heard

Stuttgart's water.

Disposal of waste.

Management of cleansing services.

Cemeteries.

Municipal forestry.

Stuttgart mentioned as a model; and it would be easier to array such concrete illustrations from the housekeeping of various other cities.

Meaning of municipal responsibility.

But a deep responsibility for the welfare of the municipal household means something very different from the successful conduct of these specific business undertakings. Their assumption, or their relegation to private hands, involves little more than a decision from time to time as to what is opportune and what is inopportune. It is conceivable that the German city might do none of these things, and that the American city might plunge into them all, and yet that the German city should remain a far more positive and essential factor in the life of its citizens. For the German city would hold fast to its conception of the municipal household, and would yield nothing of its solicitous oversight and its inclusive responsibility. The German city holds itself responsible for the education of all; for the provision of amusement and the means of recreation; for the adaptation of the training of the young to the necessities of gaining a livelihood; for the health of families; for the moral interests of all; for the civilizing of the people; for the promotion of individual thrift; for protection from various misfortunes; for the development of advantages and opportunities in order to promote the industrial and commercial well-being, and incidentally for the supply of common services and the introduction of conveniences.

Aims of the German city.

Broadly but not sharply distinguished, the German cities recognize two kinds of functions: those that can be made largely self-supporting or even productive of net revenue, and those that cannot possibly be so considered. The latter are the more important; and in this class the three most important are the education of the children, the protection of the public

Two kinds of functions.

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health, and the care of the poor and unfortunate. To accomplish these and other kindred ends, municipal life in Germany has been reduced to a science. German population-masses are more cohesive than Anglo-Saxon masses, and the individual is more dependent upon his neighbors and upon the community to which he belongs. The voluntary principle would not work so well in Germany as in England or America. But we must remember that the municipal intervention in Germany is not merely mechanical. Principles exist which give heart and soul to the system. The voluntary agencies have been absorbed in the municipal, or affiliated with them, without crushing out the sense of human brotherhood and mutual responsibility upon which, after all, must rest the well-being of any community.

Municipal life as a science.

Municipal financiering in Germany is a high art. It unites thrift and minute economy with broad liberality. Its most obvious feature is to make each service or department self-sustaining or productive so far as possible, and to make the social benefits of the non-productive departments so clear as to admit of no doubt. Where charity has become so completely municipalized, the duty of caring for the aged and the submerged poor involves a heavy draft upon current revenues; but ultimately German finance will have perfected systems of compulsory insurance that will enable the State and municipality to accumulate social salvage funds out of which old age and distress can for the most part be sustained. Education will remain a heavy burden; but the German community no longer needs to be reminded that thorough and specialized education tells so promptly upon the industrial productivity and commercial prosperity of a city or a province that it is cheap at any cost. In like manner Germany's municipal statisti-

Principles of municipal finance.

Support of poverty.

Education; its cost and worth.

The financial argument for sanitary expenditure.

cians and hygienic experts have come to the aid of the financiers with facts and conclusions so irresistible, that the people are ready to bear burdens of taxation for the boon of an exemption from febrile diseases and a reduction by one half of infant mortality. The money that is spent in the interest of the common health is applied with such amplitude of scientific knowledge,—and such care that every dollar shall count for an end that is in the long run commercially profitable as well as socially salutary,—that the investment is plainly seen to justify the borrowing of the money and the pledging of the municipal credit. Meanwhile, the courage of the community is sustained, under the heavy ordeal of taxation, by the success of the municipal government in managing the departments that are productive in their nature. Even though these departments yield only a small fraction of the total revenue necessary to meet the expenditures of a municipality that is responsible for the welfare of all its people, they give an air of thrift to its financiering, and encourage an optimism that sees in the future monopoly-rentals of various franchises and supply-services a largely increased proportion of the public revenue.

Optimism arising from good management of earning departments.

Public works.

It is not strange that the American observer should at first be most impressed by the splendid efficiency of German city governments in the prosecution of public works and enterprises. This is largely due, of course, to the superb and continuous organization of the executive administration. The burgomaster is actually or virtually a life incumbent, and his magisterial associates who conduct the various departments either hold their places by life tenure or else upon terms practically as permanent. The city council, representing the people's will, is renewed by in-

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stalments. The terms are long, and reëlections are so usual that the personnel of the body is transformed very slowly, and nothing like an abrupt or capricious change of policy is ever probable. Consequently it is possible to make long plans, to proceed without haste, to distribute burdens through periods of years, to consult minute economies, and to make an even, symmetrical progress that has far more of tangible achievement to show for every half-decade than could be possible under our spasmodic American methods. A German city, let us say, decides to have well-paved streets, and to modernize its whole thoroughfare-system. It proceeds to learn everything that can possibly be known about street-making. The effect of its immediate climatic conditions upon different kinds of materials is studied theoretically and experimentally. The municipal department of public works does not move a step until every detail of the problem from the engineering and from the financiering standpoint has been thoroughly worked out.

Execution of far-reaching plans.

Deliberate methods.

On this fashion the magnificent public works of Berlin have proceeded. The result is that in the period from 1870 to 1890, it may be asserted, $100,000 accomplished more for the permanent making of good streets in that city than $1,000,000 in New York. Vastly more money had been expended on the streets of New York than on those of Berlin in these twenty years. Yet Berlin was beautifully paved, while New York, except for a few favored streets, was almost as impassable as Constantinople or Damascus. Since 1890 New York streets have improved; but the contrast in 1895 was only a little less painful. Nothing accounts for this difference except the superiority of sound business methods in Germany over wasteful political methods in America. Throughout all Germany the public-works departments of the towns are

Berlin's paving, and New York's.

Business versus politics.

busy carrying out the mandates of their respective municipalities, and creating on permanent lines the material attributes of the well-ordered modern city. Nothing is hurried, yet nothing seems to lag when once begun. Street-systems are rectified; new suburbs are judiciously laid out; here a new water-supply, introduced from high sources, employs engineers, architects, and conduit-builders. In another city new sewers are in progress, on a plan for the complete and final drainage of the place. River frontages are undergoing magnificent improvement, for purposes of water traffic. Gas-works, electric-plants, market-houses, public abattoirs, school buildings, epidemic hospitals, bridges, wharves, subways, or whatever else the expanding requirements of the municipality may ordain,— all are in course of construction by methods that insure the highest utility and greatest permanence. To cite illustrations or to present statistics would introduce an almost endless task. It is enough to say that the German cities have accepted the idea that their appointments must conform to the newly recognized necessities of modern life, and that they are steadily supplying these appointments with masterly administrative and technical ability, and with such a combination of close economy and generous foresight as no other nation has ever exhibited.

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An era of improvement in German towns.

Recognition of modern needs.

Berlin's new era of municipal progress may be said to date from 1861. In that year it annexed considerable suburban territory. The old city walls were torn down to give free communication with the new quarters. The Emperor William came to the Prussian throne in 1861, and his accession marked the beginning of a liberal policy on the part of the State toward the city of Berlin. The new *Rathhaus* (City Hall) was begun in that year. Prussia's advance among European powers gave Berlin an ambi-

Berlin's new impulse in 1861.

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tion to rival Paris. The influence of the Haussmann transformation of Parisian streets was felt in the German capital. The successive wars and Prussian victories of 1864, 1866, and 1870–71, ending with the formation of the German Empire and the designation of Berlin as its capital, enormously stimulated the municipal life. A policy of bold initiative was entered upon. Boulevards were constructed, and the new suburbs were handsomely laid out. The royal government had always controlled the inner street-system,— together with the paving, drainage, the Spree navigation, and the bridges,—and had allowed a private company to furnish the water-supply. A private company also controlled the gas-supply. Education was largely in private or clerical hands. But the awakened municipality acquired from the general government in 1874 the control of the streets, and set about reforming them. It entered upon projects of widening and straightening lines of main thoroughfare, and of laying good pavements. The process has gone on steadily to this day, with magnificent results. The city acquired control of the shallow and sluggish Spree, embanked it with massive walls, flanked it with broad stone quays, dredged it for heavy traffic, and replaced its old wooden bridges with modern structures of stone and steel.

Effect of campaigns.

Reforming the streets.

Embanking the Spree.

In 1873 the municipality had acquired control of the water-supply, and had at once proceeded to create a new and improved system. It also determined to abandon the growingly dangerous practice of draining the city sewage into the diminutive Spree; and it entered not only upon a marvelous system for the disposal of sewage, but also proceeded in the interest of the public health to create a great series of sanitary institutions, including municipal slaughter-houses and market halls, hospitals for infectious diseases,

An aggressive municipal program.

unified arrangements for public and private cleansing, and systematic inspection of food, houses, and all conditions affecting the public health. The beginnings of the municipal gas manufacture had dated from about 1870, and the success of the experiment had led to very great enlargements in 1875. Meanwhile, education had been municipalized with an energy and thoroughness perhaps unprecedented anywhere. Manufactures and railways had been encouraged, and technical and practical education had been so arranged as to promote Berlin's development as a center of industry. Parks, recreation-grounds, and gymnastic establishments were provided for the people. Housing was at length brought under municipal regulations of a very strict character, in the interest of the working masses; and an excellent and comprehensive system of street-railways was devised,—under municipal inspiration, though under private management,—for the better facilitation of local transit and the wider distribution of the rapidly growing population. Berlin is about four times as large as it was in 1860; and the immense influx of people, chiefly of the working classes, has been received and accommodated with an ease that seems nothing short of magical.

The making of a metropolis.

The quantity of water used by a city is regarded by British sanitary authorities as, in a rough way, a measure of its relative civilization. An abundant supply of pure water, thoroughly distributed, is indeed a vital consideration for any city,—too vital to be entrusted to private business control. Berlin has abundant reason to rejoice in the past twenty years that it has had direct management of its water. The quantity has had to be constantly increased, and the purity of the supply has had to be secured by filtration, involving elaborate plants. New sources, more

Berlin's water supply.

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and more remote from the city, have had to be found and brought into the system. A private company could never have been induced to make the investment required for a sufficient and purified supply; but the city has found it profitable, considered as a purely commercial undertaking. The works supply Berlin with about 40,000,000 cubic meters per annum, of which nearly ten per cent. is used free of cost for various public purposes. The income collected from private users pays all expenses of operation, and after providing for interest on the cost, and for a sinking-fund to redeem the debt on the plant, it yields a surplus net profit each year of about 2,500,000 marks.

The financial point of view.

The sanitary consideration.

The sanitary authorities at Berlin have led the world in recent inquiries into the relation of water-supply to public health; and the character of the service rendered by the Berlin water-works is constantly improving. Science has triumphed notably over natural difficulties, and the municipality will be able, in developing the service, to keep pace with the rapidly increasing demand. The Berlin population is housed in tenement-flats, and water is sold by meter — not to the tenant, but to the landlord of the building. The system prevents waste without depriving the people of an amount equal to all their necessities. It is a method that has been worked out gradually and intelligently, and it saves the city a great deal of money. The other German cities are adopting it.

Water sold by meter.

When the Berlin authorities decided to establish a metropolitan water-supply, they also determined upon another and still greater undertaking. They perceived that the modern city requires,— as the complement of a good system of pure water distributed through every street and every building,— an equally good system of house drainage and of sewage removal and disposition. The modern ideal is a strong,

Good sewerage as the complement of good water supply.

pure volume of water, derived from sure and constant sources that are beyond danger of pollution, forced by ample pressure through a network of mains and penetrating every abode,—and then, being contaminated by use and saturated with refuse from closets, kitchens, and street drainage, collected again and carried off in sewage tunnels to some safe destination. The old-time Berlin had drained into the Spree, and had used vaults for solid waste instead of the modern all-receiving sewers. Good drainage was as necessary as good water, and the discharge of unpurified sewage into the Spree as a permanent system was out of the question. Artificial purification, and the manufacture of fertilizers from the precipitated solids would have been possible; but Berlin wisely adopted the better plan of natural purification by the irrigating of land. Immense research was bestowed upon the subject, with the result that the Berlin drainage is the most perfect in the world and is unquestionably that city's most notable achievement in municipal housekeeping, so far as physical forms and conditions are concerned. The city was divided into twelve drainage districts, called "radial systems," the divisions being arranged upon considerations of topography. The sewers of each district were to converge at a common center, at which would be located a receiving-basin and steam-pumping works. A tunnel was to connect each of these district centers with the reservoirs and pumping-works of a sewage farm some miles distant.

Abandonment of the Spree.

Adoption of irrigation system.

The radial systems.

The work upon this vast project began about the middle of the decade 1870–80, each radial system being dealt with independently. By 1880, systems I., II., and III. had been put into use, and thus the inner sections of the city, including the business core, were connected with a large area of municipal farm-

The project begun.

CHAP. VI. land lying some fifteen or twenty miles southward. System IV., embracing the north central part of Berlin on the upper side of the Spree, was also ready for use before 1880, and was connected with a very extensive tract of land lying a few miles northeast of the city. System V., pertaining to the great eastern residence portion of Berlin, was opened in 1881, although general house-connection was not complete until 1886. Systems VI. and VII., draining the southern outskirts, and including portions of the suburban towns of Charlottenburg and Schöneberg, were in full service by 1887. Systems VIII. and IX. lie north of the Spree at the extreme western limits of the city. System X. is on the north side and embraces new and partly built-up quarters, while Systems XI. and XII. are on the eastern limits. System VIII., draining due north to a third great body of municipal land through a tunnel perhaps ten miles long, was ready for use in 1891, as also was System X. The remaining systems were not urgently needed, and work upon them was allowed to proceed more slowly.

Completing the "systems."

Excepting for some thinly populated outskirts, therefore, all the houses of Berlin are now connected with the new drainage-works, which are carrying annually from 60,000,000 to 70,000,000 cubic meters of sewage to be distributed by scientific irrigation over the surface of municipal farms having an aggregate extent of more than twenty thousand acres, or upwards of thirty square miles. Additional land has been bought from time to time. It is interesting to note that a city whose municipal limits include only twenty-five square miles should have acquired an outside domain of thirty square miles as a place for the discharge of its liquid waste. The Berlin sewage farms were tracts of rather poor and sandy soil; but land is not very cheap in the vicinity of so great a city,

Extent of the sewage farms.

and the purchase money reached about 15,000,000 marks. An additional 15,000,000 marks had been spent prior to 1893 in laying out the farms, trenching and tiling them for irrigation purposes, and equipping them with the necessary buildings and improvements. At that time there had been expended upon the radial systems in Berlin and the discharging tunnels about 65,000,000 marks, making a total investment of nearly 10,0000,000. With the further outlay to be made in completion of the system as a whole, the new Berlin sewage-works, including the farms and their improvements, may perhaps be said to constitute a 120,000,000 mark ($30,000,000) plant.

Cost of the new drainage works.

It is novel from an American point of view to consider a city's drainage-works as a self-sustaining or productive enterprise, like its water-works and its gas-works. But Berlin regards the matter in that light. Before the new system was introduced, the citizens had to pay for the removal of night-soil, etc. The city now charges a moderate sewage-rate against all property that the system serves. The parts of the farms that have been brought under closest cultivation are already very profitable, although the net income from the entire thirty square miles does not yet pay the full interest on the investment (for purchase and improvement) of 30,000,000 marks. The fertilizing value of the sewage is so great, and the administration of the farms is so superb, that within a very few years the investment will have become enormously productive. On each of the farms are nurseries of young fruit-trees, and considerable areas of orchard have already begun to yield some fruitage. Prodigious crops of vegetables are grown, and the yield per acre of cereals and grass is similarly remarkable. Within a reasonable period the sewage farms will have earned profits enough to pay back all that was

Financial outlook.

Profitable farming.

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invested in them, and eventually they will be a source of surplus income that will materially lessen the load of municipal taxation. Meanwhile, from the sanitary point of view, the system is an unqualified success. Far from being unwholesome, moreover, for the people who live and work upon them, the farms themselves are so free from deleterious influences that convalescent colonies from the city hospitals have now been established on them, with gratifying results.

Sanitary success.

The problems of water-supply and drainage — one or both — have in recent years forced themselves upon many other German cities besides Berlin. Hamburg's experience is especially worthy of note. The second city in the empire, with a population of 600,000, with great wealth and vast shipping and commercial interests, Hamburg had long been aware of the need of a pure water-supply. Its situation in a flat region at the head of tidal water in the Elbe had seemed to make necessary the continued use of the river-water, in spite of its unwholesome condition. But Hamburg received a great impetus in all directions from its inclusion in the German Zollverein a few years ago, and from the success of the joint municipal and imperial project of immense harbor improvements. As had happened earlier in Berlin, a conjunction of political, commercial, and sanitary motives now stirred the Hamburg authorities to an unprecedented activity. A magnificent new City Hall, to be opened in 1894, was entered upon as a symbol of the new municipal era. As the prime sanitary reform, it was determined to construct the greatest and most complete filtration-plant in the world, to supply the city with an unlimited quantity of Elbe water, purified to meet the severest tests of chemist and bacteriologist. The new works were under construction when the frightful cholera epidemic

Hamburg's notable experience.

A great filtration plant.

of 1892 swept away thousands of victims. It was demonstrated that the disease had been propagated through the use of Elbe water, and that filtration would remove the cholera germs. The new works were to have been ready for use in 1894; but by great effort they were completed and put into operation in May, 1893. During the summer and autumn the river water, when introduced into the subsidence basins and filters, contained millions of cholera germs to the cubic inch. As it emerged and was supplied to the city, the water was as safe and wholesome as if it had been brought from high Alpine sources. The filtered water averted the return of the epidemic in 1893. So striking an object-lesson in municipal health administration has never been presented before, and its effect will have been felt everywhere in Europe. The cholera invasion led Hamburg to adopt various sanitary reforms, and I shall discuss them more particularly in the next chapter. Hamburg's sewers form a fairly complete modern system, but the city has not finally solved its problem of sewage disposal. At present the entire volume is carried in a huge collecting tunnel to a point below the city, where it is emptied into the river during the hours when the tidal movement is seaward, and dammed back when the tide flows in. But the amount is too great to be carried out satisfactorily, and much of it pours back to foul the harbor with the turn of the tide. Ultimately Hamburg must adopt a plan of artificial purification, after the example of London, or else must follow Berlin's still better example of natural filtration through the soil of sewage farms.

Conquering the cholera.

Hamburg's sewerage.

Breslau, which ranks fifth in population among the German cities, and is the second city of Prussia, is too little known to the English-speaking world. It is one of the model municipalities, and its administra-

Breslau as a model municipality.

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tion deserves high praise for many excellent features. Dr. Forckenbeck, who served for so many years as the upper burgomaster of Berlin, and under whose masterly administration so many of Berlin's most noteworthy undertakings were accomplished, had previously distinguished himself at Breslau in a like position. The town lies on both banks of the river Oder, from which stream it pumps its water-supply. It has for some years successfully filtered the water, and it also has carried into full execution a system of modern sewers and *riesel-felder* (sewage farms) which leaves little to be desired. The water-works are a source of large net income to the city, and the farms, which are rented to tenants, seem also to be a profitable investment, quite apart from the indirect benefits of a system so satisfactory from the sanitary standpoint. The entire population is served by the water-works, and all the house and street drains empty into the tunnels that discharge in the basins of the riesel-felder.

Filtered river water and sewage farms.

Munich had long suffered from an unenviable reputation throughout Europe for its high mortality-rate, and particularly for the prevalence of malignant forms of typhoid fever. There were thousands of cases of fever every year, and the number of deaths from that cause alone was high in the hundreds,—in some years exceeding a thousand. In 1883 a new water-supply from pure springs in the Alps was brought into Munich, tainted wells were closed, and the foul river-water was superseded for drinking purposes. As soon as the new order of things had become fairly established, the yearly deaths from typhoid fever could almost be counted upon the fingers of one's two hands. The new water-supply of Munich was attended by other sanitary reforms, including improved sewers and the substitution of a

Munich's Alpine water and its effects.

magnificent municipal abattoir with all modern conveniences and ample cattle markets and yards, for about eight hundred small private slaughter-houses that had existed in different parts of the city. The introduction of Alpine water seemed a bold undertaking at the time; but it has been an easy matter to make the works earn surplus profits after paying all expenses and providing for interest and sinking-fund.

Municipal abattoirs and other Munich improvements.

All German cities, with a few unimportant exceptions, now own and operate water-works, which are made to earn profits averaging from ten to fifteen per cent. on the amounts invested. Frankfort-on-the-Main has within a few years invested something like 30,000,000 marks in improved water-works and sewers, and brought about an improvement in health conditions that has been most extraordinary. The water is taken from several sources, and is of good average quality. The sewage is discharged into the river, after having undergone treatment by chemico-mechanical means for clearing and purifying,—the precipitated sludge being sold as a fertilizer. The results, as shown in a diminished death-rate and the disappearance of certain forms of disease, have been even more notable than the change at Munich.

Frankfort's water-works and sewage purification.

Braunschweig, or Brunswick as we call it in English, illustrates admirably the transforming effect of the new municipal spirit. In 1861 the city celebrated the one thousandth anniversary of its founding. It was then a compact town of perhaps 40,000 people, and medieval in architecture and characteristics. It is now a lively manufacturing city of more than 100,000 inhabitants, and is still growing rapidly. It has lately adopted the plan of sewage farms, having completed a modern system of filtered water-supply. Its wonderful wealth of old collections illustrating art and history has been brought into curious touch with

Brunswick's expansion and renovation.

Water and sewer systems.

CHAP. VI. new institutions for practical and popular education. Under its newly-paved streets are new sewers; and in its quaint and famous timber-built houses, erected hundreds of years ago, one finds modern plumbing of the last twenty years in universal use. The commingling of the new and the old in this revivified medieval capital is merely representative of what has been brought about since 1870 in scores of ancient German towns. The municipal self-consciousness has been marvelously awakened, with results that make the story of expansion and progress in our American cities seem quite prosaic.

A type of numerous towns.

I have perhaps dwelt too long upon what the Germans call the *wässerung* and *entwässerung* of their cities. But I have chosen to do so because it seems to me that this double topic of water-supply and drainage is most truly typical of that varied physical regeneration that cities must undergo in order to be the fit abode of modern communities. I am not compiling a directory of German municipal improvements, or else I should have to compliment Dantzic for its water, its sewers and riesel-felder, and its general demonstration of the manner in which a quaint walled city and provincial capital of the fifteenth century can within two decades make itself a great seaport by dredging its shallow harbor to admit modern steamers; can give its population a new prosperity through the development of manufactures; and can lift them in the scale of intelligence and happiness through provisions for education and for the unfortunate.

"Wässerung" and "entwässerung."

Dantzic's achievements.

Clean streets and alleys, and immaculate back yards, were certainly not conspicuously characteristic of German cities twenty years ago. But the recent improvements in water-supply and drainage, as well as in general sanitary administration, might naturally

Street-cleaning in German cities.

be expected to have the accompaniment of reformed cleansing arrangements. Moreover, clean streets had been made feasible by the smooth, new paving of roadways and sidewalks. As a rule, the streets of German cities are now kept in a state of enviable cleanliness. Berlin's thoroughfares are scrubbed and swept continually, under a system that is perfectly organized, and that costs less than $500,000 a year. It is a flexible system, providing for the prompt increase of workmen in bad weather, and never helpless in the presence of a sudden snowfall. The central streets of all the leading German cities are thoroughly cleansed once a day, at night or very early in the morning, in addition to which "flying columns" of street-cleaners are on constant day duty to remove horse manure and other accumulations. In the residence quarters of many German cities it is still the rule that street-sweeping is an obligation that rests upon the property-owners or occupiers. But Berlin, Dresden, Hamburg, Frankfort, and some smaller cities, provide a full municipal service, while in Leipsic, Cologne, Stuttgart, and other places, the cleansing is partly municipal and partly private. Munich, Breslau, and numerous smaller places throw the entire burden upon the owners of adjacent property. The tendency is toward the direct, full municipal service. But the important fact is that under all the different systems the municipal authorities prescribe the rules and regulations, and see that they are carried out. Labor is so cheap and abundant that it is easy for the German householder to arrange for the regular cleansing of his sidewalk and his share of street frontage. The municipality, as a rule, attends on its own account to the removal of the sweepings. It has also become the prevailing practice in German cities to make the removal and disposal of domestic ashes and garbage a municipal function, and

The Berlin system.

Extent of municipal service.

Garbage removal.

CHAP. VI. this service is conjoined with that of removing the street sweepings.

Dresden's cleansing.

So far as I am aware, Dresden is the most fastidiously clean of all the German cities. It extends the uniform daily cleansing to a large area. Berlin's district of daily cleansing is comparatively small; but the area whose streets are swept from three to five times a week is large, and all the important outlying streets are well cleansed twice a week. If I should name the small sums for which Hamburg, Dresden, Bremen, Düsseldorf, Essen, and other cities obtain remarkably thorough and satisfactory results, I am afraid I should not be believed by American municipal authorities. Everywhere in Germany one notes the perfect organization of these services, and their rapid improvement as the standards of civilized life become more rigorous. The trend in Germany is toward a unified direct municipal service of street cleansing, sprinkling, and garbage removal; and while much diversity of system exists at present, there is no failure in any large German town of that exercise of full municipal authority and responsibility which prescribes what shall be done and sees that the prescription is carried out.

Unified management of cleansing, sprinkling and garbage removal.

Municipal gas-plants.

About two thirds of the large German cities own and operate gas-works as municipal enterprises. The list of such cities numbers approximately thirty. Public lighting, under modern conditions, has grown to be a very extensive and necessary social service. Nearly a quarter of all the artificial light required by the denizens of many modern European cities is used in streets and public places. Obviously, the cities that reserve the gas-supply as a municipal monopoly are enabled to provide for public lighting at the lowest absolute cost of manufacture. With the unlimited

technical and administrative skill that they control, the German cities are in my judgment at a distinct advantage over private corporations in the economical conduct of the gas business. The tendency of municipal ownership is, moreover, toward a more complete street illumination and a more thoroughly diffused private use of an article that is at once a civilizing agent and a police protection. As a monopoly enterprise it is of course easy to make the works pay good profits. The cities which are now supplied by private companies will probably, one after another, as franchise periods terminate, assume municipal control. Everything indicates such a policy.



Tendencies of public ownership.

Meanwhile, most of these cities secure gas for public illumination at greatly reduced prices, and the cost to private consumers is strictly regulated. Munich is the largest of the cities that are supplied by a private company; and I remember at one time observing with satisfaction that the municipal laboratory of that city tests the illuminating power of the gas every day, in order to protect the citizens from an inferior quality. This Munich circumstance fairly illustrates the full municipal supervision that is exercised in Germany over the gas-supply, even when under private ownership. For the benefit of American cities entertaining the absurd delusion that there can be beneficial competition in the gas business, it should be remarked that only one of all the cities of Germany, namely, Frankfort-on-the-Main, has chartered rival private gas companies; and the price of gas is higher there than anywhere else in the country. Among the cities that own their own gas-works are Berlin, Hamburg, Breslau, Leipsic, Dresden, Cologne, Königsberg, Bremen, Düsseldorf, Nuremberg, Dantzic, Magdeburg, Chemnitz, Barmen, Stettin, and Brunswick. The principal ones supplied by private

Public control of private plants.

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companies are Munich, Stuttgart, Frankfort-on-the-Main, Hanover, Strassburg, and Altona.

Municipal policy as regards electric plants.

In the matter of municipalizing electricity, the German cities have moved somewhat slowly; but the marked tendency is toward the appropriation for the welfare of the community of all advantages and profits to be derived from the distribution of light and power from central electric stations. The governmental operation of telegraph and telephone lines, and the municipal supply of gas for lighting and for motors, had predisposed the German communities to a public control of such newer services as electric lighting and the electrical distribution of power. The municipal authorities would naturally be reluctant to admit private companies to any rights under the street surface. Public control of gas- and water-supplies, and of other services requiring pipes, tubes, and wires, has resulted in so orderly and convenient a system of underground conduits that it is deemed wise to allow no private companies to disturb it. Municipal electrical works are regarded as the logical development of a policy generally accepted in Germany. Berlin is an exception to the rule, perhaps because the feasibility of public control was not so apparent when the Berlin Electrical Company obtained its franchise. The Berlin works were opened in 1886.

Hamburg's electric plant, — in hands of lessee.

Hamburg's municipal plant was ready in 1889, and that city is peculiar among its German contemporaries in the fact that it leases out both its gas-works and its electrical-works to be operated for it by a private contractor. Lübeck, Barmen, Königsberg, Metz, Darmstadt, and Duisburg were operating general municipal electrical-works before the end of 1890.

Other cities which have municipal works.

More recently, the five important cities of Breslau, Cologne, Düsseldorf, Altona, and Cassel had built municipal plants; and still later, both Dresden and

Stuttgart decided to enter at once upon the same policy. Leipsic, on the other hand, has preferred a different arrangement, and has given a franchise to the Siemens & Halske Company, on terms regarded as especially favorable to the city and the public. The works came into operation in 1895, and at the end of the franchise period, which is a long one, they are to become municipal property without cost.

Leipsic's different policy.

Although Berlin and Leipsic have given electric-light franchises to private companies, let no reader imagine that the interests of the municipalities and of the citizens were betrayed, or left at any point unguarded. As an example of what is considered a suitable form of franchise in Germany, it would be instructive to quote the entire revised contract made in 1888 between the Berlin city authorities and the Berlin Electric Works Company. It defines the area within which the company may operate. It requires, under heavy penalties, that the area be fully provided with main wires within a brief period specified in the contract. As compensation for permission (not exclusive) to use the streets, it is agreed that the municipal treasury shall receive 10 per cent. of the company's gross receipts, and further, that whenever the company earns a net profit of more than 6 per cent. on its actual investment of capital, the city treasury shall receive 25 per cent. of such excess profits, in addition to its 10 per cent. of the gross income. Still further, it is agreed that the company shall provide the magnificent electric illumination of the central avenue Unter-den-Linden, together with that of the Potsdamer Platz and the Leipziger Strasse, with all expense of maintenance and attendance, at a price so low as to be nominal. Besides this, a special and favorable rate is provided for such further electric street-lighting as the municipality may desire. The

Interesting points in the Berlin franchise.

Liberal compensation to city.

Favorable terms for street-lighting.

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Rights of inspection.

Various precautions.

Rates to private patrons.

Right of city to purchase plant.

In Germany the public interest commands the best talent.

city authorities retain the fullest rights of inspection both technical and financial, and all the company's affairs are open to the knowledge of responsible public officials. The city requires the deposit of 250,000 marks as caution-money, and holds the company down to the strictest rules in regard to the laying of wires and breaking up of street or sidewalk surfaces. The company is required, moreover, to maintain a renewal fund equal to 20 per cent. of its invested capital; and this fund, in the form of Berlin municipal bonds, must be kept on deposit with the city magistrates. Accompanying the agreement was an official schedule of rates that the company was authorized to charge its private patrons. No departures from established rates can be made without consent of the city authorities. Finally, the municipality reserves the right to buy the entire plant and all its appurtenances at any time after October 1, 1895, upon a fair basis of valuation carefully provided for in the contract. The arrangement in all its details is an elaborate one, but it is the perfection of business lucidity and intelligence. What if New York, Chicago, Boston, and Philadelphia had based all their grants of valuable municipal privileges in the past thirty years upon principles as sound as those that protect German municipal interests in contracts with quasi-public supply corporations? In studying these German contracts one is always impressed with a sense of the first-class legal, financial, and technical ability that the city is able to command; while American contracts always impress one with the unlimited astuteness and ability of the gentlemen representing the private corporations.

Street-railways in Germany.

I should prefer to wait five or even ten years before writing upon the relation of the German municipality to street-railways and transit facilities. The business of transporting urban passengers is far more highly

developed in America than in Europe. Our urban populations are much more widely distributed, and rely far more upon public vehicles. Most German cities were originally walled and very compact. The large tenement building, several stories high, housing numerous families, is the prevailing type. Municipal areas are small, and outlying suburbs are comparatively unimportant. Families, whether in the city or in the suburbs, as a rule live near their daily work. All this has begun to change; and a redistribution of population over larger areas, under the influence of new industrial conditions, and with the increase of cheap transportation facilities, is now taking place rapidly in Germany, as almost everywhere in Europe. But the magnitude of the movement will hardly make itself realized for several years to come; and the transit-systems will not have attained an importance at all comparable with those in America before the end of another ten years.

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Increasing importance.

Yet the horse-railways of Berlin, Hamburg, Frankfort, Munich, Leipsic, Dresden, Cologne, Stuttgart, and other cities are to-day exceedingly well managed, and are thriving under a patronage that grows rapidly from year to year. The first street-railway in Germany was a short line opened at Berlin in 1865. Excepting for small beginnings at Hamburg and Stuttgart, no other German city ventured upon the innovation until 1882, when Dresden, Leipsic, Frankfort and Hanover entered the list. In the next ten years more than thirty other leading German towns began their street-railway systems. Nothing could have been more logical than an era of street-railway construction following upon an era of new street making and paving, which had included the straightening and widening of main thoroughfares, and the development of radials from town centers to outer peripheries.

Beginnings in various cities.

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Consolidated systems the rule.

While in several German cities there is more than one street-railway company, the prevailing rule and tendency is toward a single system with one central management, brought under very direct and intimate municipal supervision. The money value of street-railway franchises in Germany is beginning to be considerable, but it will yet be several years before the city treasuries can hope to realize large incomes from the rentals and tributes exacted from transit corporations. Every one who goes to Berlin is now impressed with the admirably complete and satisfactory service of horse-cars that permeates the whole city. Nearly all these lines belong to the "Grosser Berliner Pferde-Eisenbahn-Actien-Gesellschaft" (Great Berlin Horse Railway Stock Company). The municipal authorities have carefully projected the new lines or extensions that this system has added from time to time, having in mind the present and future development of the metropolis. The company has paid lump sums for the franchises, varying from a few thousands to hundreds of thousands of marks, according to the extent or probable paying character of the new line or extension. In addition, the company has assumed heavy burdens with regard to the maintenance of the paving and cleansing of streets traversed by its lines, and is further compelled to make yearly cash payments to the municipal treasury in return for its privileges, on the basis of its earnings. At the end of the franchise, in the year 1911, the entire system falls to the municipality as its own. Meanwhile the company pays to the city an annual cash sum that now amounts to more than 1,000,000 marks. This results from a percentage on gross receipts, the rate increasing as the company's business grows. The minimum rate is 4 per cent., but for several years past 7½ per cent. or more has been paid.

The Berlin company.

Payments to city.

Hamburg and its street-railway system.

Hamburg's street-railways pay a municipal tax on each passenger carried, which would amount to perhaps 8 or 10 per cent. on gross receipts. Besides this, the companies are subject to other municipal taxes, and have duties regarding the maintenance of streets. Their tracks will revert to the city at the end of the charter period. On the basis of their present business they are unquestionably paying the municipality as much as they can afford. The principal Hamburg company has not been accustomed to pay its shareholders more than about 5 per cent. a year; and the stock represents actual investment. Like Berlin, Hamburg is principally served by a single street-railway corporation, other companies operating one or more lines to Altona or some other suburb. Cologne's recent enlargement of its limits and rapid suburban progress give its transit system an interesting outlook. The "Köln Strassenbahn-Gesellschaft" (Cologne Street-Railway Company) is working upon a thirty-year franchise which will expire in 1916, when the municipality will come into ownership of the lines without paying anything for them. Meanwhile the company pays a small fixed yearly rental of perhaps ten thousand marks, and also pays to the city 15 per cent. of all profits accruing above a 5 per cent. dividend to the shareholders. The Frankfort-on-the-Main contract would seem to be still more favorable to the city. Frankfort's street-railway company—which monopolizes the transit business except for three or four single electric or steam lines operated by independent companies and running out to neighboring towns—pays the city a fixed annual rental of about thirty thousand marks, adds thereto 6 per cent. of its total gross receipts, and is further under obligation to give the city 50 per cent. of all its surplus net earnings above 10 per cent. per annum.

The Cologne arrangement.

What Frankfort exacts.

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And so I might cite other contracts in other cities. Suffice it to say that with few exceptions the German cities manage to obtain payments from street-railway companies up to a point fairly equal to the present rental value of the franchises they hold, besides taxing them as heavily upon their invested capital and their business operations as they would be taxed if they were ordinary merchants or manufacturers. And the franchise payments are so arranged as to increase with the earning capacity of the privilege. The fixed tax or street-maintenance charge, plus the gross-receipts percentage, plus a contingent proportion of surplus net profits, is the approved German form of compensation for street-railway franchises. Municipal supervision extends minutely to such questions as the fixing of fares and the frequency of service. There are exceptions to the rule, but it may be said almost without qualification that for minimum distances the fare on German street-cars is 10 pfennigs (2½ cents), and that for longer rides the passenger pays fifteen or twenty pfennigs, according to the divisions of the route. On some lines the 10-pfennig fare holds good regardless of distance; but all lines charge that rate for a short ride. In some cities there are special rates for prescribed classes. For instance, I know of at least one city where school-children are carried at one third of regular rates, as a part of the bargain between the municipality and the company.

The approved form of compensation.

Fares prescribed.

Reduction for school-children.

I shall not attempt to describe the beginnings of electric transit-systems in Germany, nor to discuss pending plans and proposals for a so-called "rapid-transit" system in Berlin. It is enough to say that a number of German cities have allowed the experimental equipment of a trolley line or two, and that the scientific German mind is at work upon every phase of the problem of electric railways, with the

Electric lines and rapid transit.

promise of results that will in a few years deserve the attention of other countries. At the beginning of this chapter I mentioned Stuttgart's consent to a trolley system. In Dresden a trolley line has recently been completed, and on various suburban routes in Germany that type of electric railway is in operation.

The housing problem.

All thorough students of the problems of life in modern cities are now agreed that the housing of the people is the question that requires, from this time forth, the deepest consideration and the boldest and most serious treatment. It is a subject that has many phases. It was the unapproached excellence of their statistical work that enabled the Germans to grasp the social importance and pressing nature of this problem. Circumstances that I have recounted were and are causing their cities to grow very rapidly. The temptation was strong upon property-owners to make their tenement-hives hold the largest possible swarms. Rear buildings were hastily run up to fill court-room spaces that ought to have been spared for necessary air and light. The German cities were beginning to repeat in aggravated form the mistakes of the great British industrial towns half a century or more ago, which left the housing question unregulated by the authorities, with the consequence of frightful overcrowding and horrible slums in which some form or other of epidemic was prevailing almost constantly, in which infant mortality was shockingly great, and in which vice and crime were nurtured as in an irresistibly favorable soil and environment.

The making of modern slums.

Superb statistical work.

The German cities count and classify everything with a minuteness that American cities would think absurd. In fact, however, this statistical work is of all things the best service that German municipalities render to their citizens. It was not until after 1880

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that Berlin began to give the most exhaustive statistical attention to the relation of the housing of the people to their condition of health. The mortality statistics were at length made to show not merely the death-rate for the whole city, but also the rate for each portion or ward of the city, and the figures were so classified and compiled as to show the number and proportion of deaths according to the number of rooms occupied by families and according to the location of those rooms with reference to street-front and to street-level,—that is to say, whether the household occupied front or back rooms, and whether those rooms were on any given floor from basement to garret. The density of population in every section was compared with the height of buildings and the amount of unbuilt space left.

Minute analysis of mortality returns.

In 1885 it was found that 73,000 persons in Berlin were living in the condition of families occupying a single room in tenement-houses; 382,000 were living in houses (I mean by "house" the distinct apartments of a household) of two rooms; 432,000 occupied houses of three rooms; and 398,000 were quartered in the luxury of houses having at least four rooms. It was found that, although the one-room dwellers were only one sixth as numerous as the three-room dwellers, their rate of mortality was about twenty-three times as high, and the actual number of deaths among them was four times as great. Compared with the dwellers in houses of more than four rooms, the mortality of the one-room dwellers was at a thirty-times greater rate. In a total population at that time of 1,315,000, the 73,000 people who lived in one-room tenement quarters suffered nearly half the entire number of deaths. Their death-rate per thousand for the year was 163.5, or about one sixth their entire number, while the two-room dwellers sustained a

The one-room families and their enormous death-rate.

Low death-rates of the well-housed classes.

death-rate of only 22.5, the three-room dwellers escaped with the marvelously low rate of 7.5, and the well-to-do people, who had four or more rooms for their household, suffered by death only at the rate of 5.4 per thousand of population.

A startling demonstration.

I am of impression that the relation of mortality in cities to the character of the housing of the people was never before shown with such frightful distinctness as in these Berlin statistics, which were compiled and published in 1888. We are wont to regard an annual city death-rate of about 20 per thousand of the total population as normal, and satisfactorily small. We have not, however, become accustomed to the minute analysis of such a rate, which might show that the respectable and normal average was made up of rates for different classes varying from 3 or 4 per thousand to 200 per thousand. Half the mortality of the Berlin one-room dwellers occurred in households where five or more persons occupied the one enclosed space.

Various rates of infant mortality.

It would require many pages to give anything like an adequate idea of the wide range of the Berlin inquiry of 1885. To have discovered that in one great ward of the city the death-rate among children of all classes and conditions under one year of age was five times as great as the death-rate for infants in another great ward, was to reveal a fact of thrilling, even of alarming, significance. It was important to have learned that in one locality the deaths of young infants constitute half the total deaths, while in another locality only one fourth of the death-rate is due to infant mortality. It was worth while to have ascertained the precise effects of residence in basements and in garrets.

The inquiry bore prompt fruit. The municipality in 1888 adopted a new code of building regulations

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New code regulating tenement building.

that was aimed directly at the conditions of inequality revealed in the extraordinary statistical reports, the character of which I have indicated. Already the city was regulating strictly such matters as the strength and fire-proof qualities of buildings, their height with reference to the street width, the harmony of the street frontage, and so on. But now there were established drastic rules requiring that at least one third of every building lot should be left unbuilt as court space for air and light; forbidding the construction of apartments for human occupancy containing less than a prescribed minimum of cubic space, or lacking proper provision for daylight, ventilation, and heating. The tenement-houses already in occupancy were brought under stricter inspection, and the authority of the municipality was in various ways employed to lessen the evils of overcrowding, and to improve the average character of the housing of the poorest classes.

Provisions for air and light.

The results are already becoming appreciable. I am confident that the renewed investigations of 1895 will have made possible a very encouraging comparison with the conditions that existed in 1885. Not the least interesting of the actions that have been taken by the Berlin authorities, in conjunction with the governmental agencies of the adjacent territory, has been the laying off of the whole present and prospective area of the Greater Berlin in districts for each of which has been prescribed exactly the character of the houses that property-owners may erect. Thus in one neighborhood there shall be detached villas; and no one may spoil the character of the district by erecting high apartment-houses. Such regulations, of course, seem irksome to many persons. Yet all cities must come to the inevitable conclusion that the rights of masses in crowded communities are superior

Character of houses prescribed for all districts of Berlin and vicinity.

Limitations of private ownership.

to the whims of individuals. The pretense that private ownership of land carries with it any absolute right to disregard general interests, is a baneful heresy that is not to be tolerated when it asserts its impudent claims.

Outflow from congested districts.

Results of the more special inquiries set on foot in connection with the last census of Germany have recently become available, and some of them seem to me intensely interesting. For example, it is highly significant of the efficiency of recent municipal measures to find that the process of depopulating the congested districts in the heart of Berlin has fairly begun. Thus, while the city's total population within unchanged municipal boundaries had, in the five years from 1885 to 1890, increased from about 1,300,000 to nearly 1,600,000, there had been a marked falling off in the five most central districts. In one, there was a loss of 178 families for every thousand,—nearly one fifth. In two others the decline amounted to 110 families for every thousand, or more than one tenth. Meanwhile the outer districts had grown enormously,—two of them doubling their population in the five years. It may be said, therefore, that the general growth of Berlin's population has lately been concomitant with a movement from the center toward the suburbs that is proceeding at an even higher velocity than the increase in total numbers. The new construction of houses conforms with the strict sanitary regulations to which I have referred, and with the broad and bold projects of the municipality for the control of population-density in all the new neighborhoods.

Rapidity of suburban movement.

Berlin tenements.

Berlin's population as yet is almost wholly housed in tenement or apartment buildings. The number of households, or distinct housekeeping establishments, was in 1890 about 367,000; and these were included in some 21,600 buildings. The average was

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about seventeen families under each roof, comprising about seventy-five persons. Including the emperor and his nobles, and all the rich families of Berlin, there were only about 2200 households out of 367,000 that had rooms on more than one floor; and of the 2200 nearly 1400 were connected with business rooms. That is to say, the 1400 families had a living-room or two "back of the shop," and some more space up-stairs. Fewer than six hundred families had private houses totally separate from business uses, for their own individual occupancy. Not one family in six hundred in Berlin lives in what Americans call a "house," as distinguished from a "flat" or an apartment in a tenement building. The average size of Berlin's tenement buildings has been increasing materially. The buildings that shelter less than about forty people were not in 1890 so numerous by one tenth as in 1880. Those occupied by from 50 to 100 people had increased about 40 per cent. in number, while those that house from 100 to 300 people had increased from 50 per cent. to 300 per cent., the increase being more rapid according to size. About half the inhabitants of the city now live in buildings containing not fewer than one hundred people. Such a system has its advantages and its disadvantages. It makes the distribution of water and gas easier, and renders perfect sewer connections more feasible. Everything depends upon the question whether or not the building is a proper one of its kind. In 1885 about 120,000 Berliners lived in cellar or basement rooms. The actual number of such subterranean dwellers was about the same in 1890, but the relative number had decreased somewhat. It is the policy of the authorities to discourage or forbid as rapidly as possible the occupancy of unwholesome basements.

Small number of separate houses.

Rapid growth of the large type of apartment houses.

Basement dwellers.

Berlin is not alone in the employment of measures

to promote improved housing. All the other leading German cities have made similar statistical investigations, and most of them are endeavoring to reform the evils that they now fully comprehend. Breslau's population is the most seriously congested in all Germany, the number of one-room families being almost incredible. Including some forty thousand people who enjoy the privilege of a *zubehör* (a small unwarmed, closet-like appurtenance of a room), there were in 1885 not less than 150,000 people, out of a total Breslau population of 287,000, who lived in houses of only one warmable room. It should be remarked that beside the 73,000 Berliners who lived on the absolutely one-room family basis, there were 498,000 who had only one main living-room per household, but were lifted somewhat above the status of the 73,000 by possessing the boon of one or two of those precious closets that the Germans call a zubehör. Dresden appears to the visitor so spacious and lovely that it is hard to believe that its working classes are huddled miserably into one-room tenement apartments. Yet it was true in 1885 that 110,000 people, out of a total Dresden population of 228,000, were living in the condition of families occupying one main room. Fortunately most of these Dresden people were able to command the advantage of a zubehör closet as a possible retreat from the otherwise absolute necessity of being born, eating, sleeping, suffering, and dying within the four walls of one stuffy room. Among the smaller cities, the housing conditions of Magdeburg and Görlitz have been notably bad. Considerably more than half of Magdeburg's population has belonged to the status of the one-room dwellers. Hamburg has housed a full quarter of its population on this dense plan, and its compact neighbor Altona has had to confess a much worse condition of affairs.

Housing in other cities.

Breslau's bad condition.

As to the so-called "two-room" families of Berlin.

The one-room population of Dresden.

Magdeburg and Görlitz.

Hamburg and Altona.

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Leipsic and Munich.

Leipsic and Munich, the third and fourth cities of Germany, afford strikingly better accommodations for their working-people.

General improvement visible.

Happily, in all these cities the worst is already past. The conditions revealed in 1885 have led to municipal policies that are making appreciably for a better average quantity and quality of house-room. The half-decade shows gains. The suburban policy prevails everywhere. The results of the detailed inquiry of 1895 will have made apparent the beginnings of a housing reform that may be characterized as a rapid evolution, rather than a revolution such as Glasgow and certain other cities have at one time or another instituted.

To have understood somewhat the housing conditions of which I have been writing is the more readily to grasp the principles and appreciate the methods of the general health arrangements and sanitary oversight that the German cities have established. Water, drainage, and cleansing systems having already been described, it is plain that the health service of next importance is the provision for controlling infectious and contagious diseases. Berlin's sanitary

Isolation of infectious disease.

system has been growing more and more perfect for many years. Isolation in crowded tenement-houses being practically impossible, the city has constructed on the most elaborate scale great hospitals for the treatment of all forms of epidemic malady. Disin-

Disinfection stations.

fection stations also, fitted up with huge apparatus for the treatment of clothing, bedding, and various movables from homes where cases of infection have been found, are in constant use. Berlin has no further fear of inability to cope with any hitherto dreaded

Berlin's immunity from grave epidemics.

form of contagious or infectious disease; for its health appliances are in readiness for the most dire emer-

gency that experience has taught its medical and bacteriological experts to anticipate as possible. It has for many years enjoyed the services and advice of Professor Virchow as a member of the municipal government; and its health department is manned or immediately counseled by a brilliant array of scientific talent. Moreover, the rank and file of the various sanitary services is full of skilled, highly-trained officials. Recent tests have shown that Berlin can defy even the cholera; and as for typhus, small-pox, and other dreaded scourges, they seem near the point of total extermination. Even consumption has been marked for governmental conquest by Germany's militant men of science. Hamburg, Munich, Dresden, Leipsic, and various other German cities have established similarly complete services for the protection of their people against the epidemic spread of infection.

Similar conditions in other German towns.

I should rank as next in importance the vast establishments that German cities have been bold enough to provide for the health control of food-supplies. I have already alluded to the magnificent central municipal abattoirs and cattle-markets of Munich, opened about the year 1887, with the compulsory closing of hundreds of small private slaughter-houses. Berlin had entered upon this policy several years earlier, and had opened in 1883, on opposite sides of the city, two great establishments, wholly superseding a business that, a few years before, had been distributed through nearly a thousand private slaughter houses and yards. The cost of these Berlin institutions, including the great central cattle-markets which come under the same administrative department, aggregated a sum, I am informed, approaching 20,000,000 marks. The policy adopted was to fix a scale of fees for the use of the slaughter-houses that would pay cost of management, 5 per cent. interest on the

Health control of food-supplies.

Municipal abattoirs.

Financial policy.

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money borrowed, and 1 per cent. for sinking fund to extinguish the principal of the debt. Thus, while the establishments are fully self-sustaining, they are not permitted to earn any monopoly profits. The number of beeves, sheep, hogs, etc., slaughtered annually under Berlin municipal auspices, approaches two million. The service is rendered more cheaply than under the old system, and the consumers of meat have the satisfaction of knowing that every health condition is fully regarded. The public inspectors pass upon the live animals, and further examine the dressed meat. The inspection service is very highly organized, and it is of course an immense advantage, — for thorough health measures, — to have all the animal food-supply of the city pass, compulsorily, through municipal establishments. Not to enumerate other cities, it is sufficient to add that a like system of exclusive municipal abattoirs and cattle-markets is now the rule rather than the exception in the leading towns of Germany, and that it is by no means confined to the largest places. The Berlin cattle-market, unlike the slaughter-houses, is allowed to earn profits; and it easily pays a net sum of half a million marks a year into the city treasury.

No profits permitted.

Health inspection.

Municipal abattoirs now common in Germany.

So much for the meat-supply. But it is also the German policy to bring under official oversight so far as possible all other articles of ordinary food-consumption. To this end the ancient custom of open public market-places is just now becoming metamorphosed into a marvelous modern system of vast municipal market-halls, erected in the populous quarters of the greater cities, and at the convenient central point in smaller places. Berlin has of late been adding rapidly to the number of its housed markets, and its debt on account of the recent cost of land and buildings for this one purpose has reached about

Housed markets.

25,000,000 marks. The value of the total investment is considerably greater than the outstanding bonded indebtedness. It is the policy of the market-hall administration to rent stalls and stands on a purely commercial basis, and to make the business profitable. The markets are on an admirable financial footing, and already help to lighten rather than to increase the burdens of the general city treasury.

Berlin's market policy.

The existing Berlin system comprises fourteen of these great provision-markets. Their advantages in aiding the work of food inspection, and in the protection of the poor against unwholesome food of all sorts, as well as against extortionate prices, are too obvious to need any exposition. How recently Berlin's policy in this direction has been initiated will be apparent when I explain that only one of the halls (the so-called "Central") was in use before 1886, while the next seven were opened in that and the two following years. The remaining six have been opened, or their construction has begun, since 1890.

A recent undertaking.

As yet the municipal cattle-markets and slaughter-houses are more general in German cities than the great market-halls; but the plan of enclosed, systematic produce-markets is now attracting the attention of numerous municipalities. What the French call the *approvisionnement* of a city population, and what the Germans call the *Versorgung der Bevölkerung mit Lebensmitteln*,— the supply of the population with food,— is everywhere on the European continent a subject of constantly increasing municipal concern and intervention. And quite generally the plan of publicly-owned cattle-markets, abattoirs, and wholesale and retail vegetable and provision markets has come into favor, together with thoroughgoing systems of food inspection, which include,— besides the expert examining corps that serve in the market-

Oversight of food supplies a part of good municipal housekeeping.

CHAP. VI.

places and go from shop to shop,— the most perfectly equipped chemical, physical, and bacteriological laboratories. There is perhaps no function that the German cities would more unanimously consider as belonging within the sphere of good municipal housekeeping than the anxious and aggressive oversight of the food-supply. This is a service that the private family, especially the poor family, cannot possibly secure on its own account. It is therefore proper that the authorities should intervene.

Organization of charity.

For the care of the poor and the relief of all forms of distress, whether temporary or permanent, the German cities are superbly organized. The policy under which relief is administered has the advantage of being a national and uniform one. Thus, while the practical working of the policy belongs to the municipal administration, there is perfect harmony of method not only throughout Prussia but also throughout the whole German empire with the exception of Bavaria and Alsace-Lorraine. Let us glance at the organization of Berlin, for example, as a typical city. There is a strong central department of the city government with a magistrate at its head and with competent specialists and general advisers attached to it. But the practical work of relief is administered by about two hundred and fifty local committees, the city being divided for purposes of poor relief into that number of districts. Each district committee has attached to it ex-officio a member of the municipal council, and a physician who has been appointed as the regular city physician for that neighborhood. In addition to these officers the local committee contains from five to twelve citizens who reside in the district and who have been appointed on the ground of character and trustworthiness.

Uniform in Germany.

The Berlin system.

Citizen members of local boards.

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To be designated a member of one of these local committees for the relief of the poor is regarded as a mark of respect and is esteemed a substantial honor. It shows that a man has good standing with his neighbors, and also that he possesses the confidence and regard of the ruling authorities of Berlin. No man would dream of refusing to serve on such a committee. It is held to be one of the most sacred duties of citizenship. Moreover, the acceptance of the trust is obligatory, refusal carrying with it the penalty of increased taxes and, under certain circumstances, a suspension of civil and political privileges. No remuneration is attached to these appointments, and the duties connected with them are far from nominal and may not be shirked. Each district is subdivided so that every citizen-member of the local committee is made responsible for a certain number of families and houses. He is expected to know the condition of his little parish. He is fully authorized to administer prompt relief in pressing cases, and is under obligation to examine thoroughly into all cases which require continued assistance. The entire local committee assembles at regular times for full report and discussion upon the condition of the district; and reports are carried to the central municipal office from all the neighborhoods. Every new member of the local committee is carefully instructed as to the scope of his duties and the range of his discretion, and inasmuch as appointments are made with great care the average of efficiency among these visitors is very high indeed. There are between two and three thousand citizens who thus serve the Berlin municipality in conjunction with the regularly salaried officials. Many of them have acted in this capacity, as friend, neighbor, and helper of the poor, for a long period of years. Every householder fully un-

Service an honor and a duty.

Minute responsibilities.

Efficiency of system.

CHAP. VI.

derstands the system, and every family in distress knows exactly to whom to apply for relief. The whole system rests upon the principle that the community is a great family, which is bound to intervene for the prompt help of those who are rendered unable through misfortune to help themselves; and there is no loss of self-respect involved in accepting aid at the hands of a permanent local committee made up of good-samaritan neighbors. Each committee has at hand every needed appliance for the prompt summoning of assistance, medical and otherwise. The organization is so complete as to make cases of fraud practically impossible, and duplication of relief is a thing of the past in Germany.

The family principle.

This system combines in a single permanent and harmonious organization all the good features that one finds in our Associated Charity societies, citizens' relief committees, and public departments for the care of the poor. The description I have given of the Berlin organization would apply equally well to Hamburg, Frankfort-on-the-Main, Breslau, Dresden, Leipsic, and, in fact, to nearly all the cities, great and small, of all portions of Germany. An analogous system exists in the country districts, and very interesting provisions for the regulation of vagrancy give the authorities a perfect control over the floating population. Berlin has a good service of municipal lodging-houses and workhouses which enables it to make humane and salutary disposition of the drifting and homeless element from which no great city is ever wholly free. Most of the large cities have also lately adopted the plan of labor colonies, established on municipal farms, for the benefit of certain classes of unfortunate citizens. The eminent success of the German cities in bringing thousands upon thousands of the best citizens into permanent and active service in connection

As in Berlin, so in other cities.

Also in the country.

Vagrants and lodging-houses.

Labor colonies.

Thousands of citizen helpers.

with the administration of poor-relief, is not to be forgotten when one is inclined to criticize German administration as perfunctory and mechanical on account of the high development of routine officialism and bureaucracy.

Insurance against sickness and old age.

Germany has not been satisfied, however, with the establishment of a more satisfactory method of poor relief than any other country has put into practice. It has seemed to German administrators and philanthropists that the whole modern plan of public alms ought to be superseded by a system of publicly managed insurance, to provide against sickness, accidents, permanent invalidism, and the feebleness of old age,—a system aiming at nothing less than the ultimate abolition of poverty. Toward this ideal the Germans have been very bravely and creditably making their way for some years. The business of insurance against sickness has now for a decade or more been carried on by numerous German municipalities, in order to supplement the various relief funds of the trades-unions, and those of the volunteer benefit associations existing in the different wards and localities of all the larger German towns. It has been the policy both of the general government and also of the municipal authorities to encourage and protect in every way the formation of these neighborhood and trade societies for insurance against illness or accident. They are all carefully registered and supervised; and thus the public authorities know precisely to what extent these voluntary agencies meet the needs of a given community.

Mutual benefit societies.

The system, as a whole, whether municipal or othwise, has had very great development throughout Germany; and at length the German empire has added the crowning touch by enacting a law for the insurance of the working classes against the helpless-

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The question of old age pensions.

ness of old age. I shall enter upon no discussion of this controverted topic of old-age pensions. It is quite too soon as yet to judge of the results of such insurance in the German cities. I may merely remark that the practical administration of this system has for the most part been put into the hands of municipal and local governments; and that the cities of Germany, great and small, are now, in addition to their many other functions, carrying on or closely supervising, for the benefit of the masses of working-people, the business of insurance against sickness, accident, invalidism, and old age. All this must seem to most Americans a novel if not a dangerous line of innovation. And yet it grows logically and naturally out of the German doctrine of the responsibility of the community for the popular well-being. The objection is raised in many quarters that this is socialism. To which I can only reply that every civilized country, for many generations, has fully acknowledged the duty and necessity of some form of public poor-relief; and in some countries, as in England, the relief of the poor has been the heaviest item of public expenditure. The funds collected by taxation and dispensed for the sustenance of mendicants and paupers have come out of the pockets of the industrious and fortunate classes. Recent German thinking on these subjects has been along the line of enforced thrift to the end that the working classes, through the accumulation out of their own wages of funds for insurance against various contingencies, may in time become fully self-sustaining, and may thus relieve other classes from the necessity of paying heavy taxes for the relief of misfortune and pauperism. I should wish to give very careful study to the subject of compulsory old-age insurance or compulsory sickness or accident insurance before advocating any such sys-

Socialism and poor-relief.

tem; but it requires no expert knowledge to perceive that old-fashioned poor-relief methods, as they exist in England and the United States, are more socialistic than the modern insurance methods long advocated and now practised in Germany.

Communities which would go so far as to inaugurate systems for the compulsory mutual relief through insurance funds of their masses of working-people, would naturally have turned their attention at some earlier time to the encouragement of saving and to protection from the extortion of usurers. As a matter of fact, municipal savings-banks are a venerable institution in Germany, and are to be found almost without exception in all the large towns of the empire. In most of the important German towns the number of depositors in the publicly managed savings-banks considerably exceeds the whole number of families in the town. This is now true as regards Berlin. In some cities the depositors are twice as numerous as the households. The rules and methods of municipal savings-banks differ considerably in matters of detail. Most of them pay a yearly interest of about three per cent. The convenience of depositors is served in the larger places by the maintenance of a great number of branch offices scattered through the different wards and neighborhoods. Thus the Berlin savings-bank system has seventy-five or more receiving offices, and the Hamburg system has about forty. Berlin has more than 400,000 depositors, with total deposits approaching 150,000,000 marks. The Hamburg deposits had passed the 100,000,000 point several years ago, and were rapidly growing in volume. Dresden makes the remarkable showing of nearly 200,000 outstanding depositors' books, with total deposits well exceeding 50,000,000 marks. Leipsic, Mag-

Municipal savings-banks.

Number of depositors.

Statistics from various cities.

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deburg, Frankfort-on-the-Main, Hanover, Königsberg, and Düsseldorf carry, in proportion to their population, marvelously large sums in the municipal savings-banks, distributed among very great numbers of depositors. Altona and Bremen show statistics almost incredible; and it would seem that in Aachen (Aix-la-Chapelle) almost every man, woman, and child in the city holds a bank-book. At the beginning of the year 1890 105,000 savings-bank books were outstanding in Aachen, with credits against the municipal *sparkasse* (savings-fund) of more than 75,000,000 marks. The banks are administered by the public authorities at a minimum of expense. Their funds are invested, as a rule, in imperial, national, or municipal interest-bearing securities. It is the universal policy to pay as high a rate as possible to the depositors, and to make the savings-bank department barely self-sustaining. In order that the advantages of savings-banks may be practically restricted to the classes for whose benefit they were founded, a limit is in most cities,— though not in all,— fixed upon the amount that will be received to the credit of any one depositor.

Remarkable instances.

Financial policy.

Municipal pawnshops (*leihhäuser*) are quite as general in the German cities as the municipal savings-banks, and some of them are very old. Thus the public loan-office of Augsburg dates from the year 1601, Nuremberg's was founded in 1618, and Hamburg's in 1650. Those of Dresden, Munich, Breslau, Frankfort-on-the-Main, and several smaller cities are now more than a hundred years old. Berlin's was established more than sixty years ago. Leipsic and Cologne began the business early in this century, as did Strassburg and a dozen other cities. On the other hand, a considerable number of the rapidly growing industrial centers of Germany have established municipal pawnshops as a part of the new municipal

Public pawn-shops.

activities of the past ten or fifteen years. Experience has fully satisfied the German cities as to the feasibility, and the practical benefits to the poor, of an assumption by the municipality itself of the function of loan agent. The rules and methods in vogue have been worked out by long experience, and are worthy of the attention of other countries. The more common rate charged to borrowers is 2 per cent. a month on small loans, and 1 per cent. a month on sums above about thirty marks (seven or eight dollars); but in some German cities the rates are considerably lower. Between the lines of the statistical columns in official reports which show the number and amounts of loans made on pledges of personal and household effects from year to year, one can with very little imagination read whole chapters descriptive of good service rendered to the poor in times of emergency, and of public protection against the class of sharks who in our American cities prey almost unrestrictedly upon the distress of the tenement-house population.

Rules and methods.

Social benefits.

If I were attempting an exhaustive topical treatment of the working functions of German city governments, I should still have to enumerate several interesting lines of activity. I have said nothing of the organization of fire departments; nor have I spoken of house insurance against fire, although this is one of Berlin's departments of municipal housekeeping. Upon the important question of parks and open spaces, I may only say that the strong movement everywhere now observable in Germany toward the provision of air, light, and space, toward the extension of municipal areas, and toward the relief of congestion in central districts, fully recognizes as a part of its practical program the necessity for the establishment of numerous small parks, playgrounds, and breathing-spaces. A great number of the German

Fire departments and fire-insurance.

Parks and open spaces.

CHAP. VI

cities and towns were in their medieval days surrounded by walls, moats and glacis belts; and these have in modern times been transformed into broad tree-lined boulevards and public gardens. And the recent expansion of these towns has left the ring of boulevards and park-spaces well toward the heart of the municipality, to the inestimable benefit of the population. Most of the municipal parks, squares, gardens, and playgrounds of German cities are small, but they are quite numerous and well-distributed. Berlin has about eighty, Hamburg has more than sixty, Munich forty-four, Dresden thirty-five, Cologne thirty-two, Nuremberg thirty-one, Breslau twenty-eight, Frankfort twenty-five, Chemnitz twenty-four, Stuttgart nineteen, Leipsic eighteen, and so on. I should be glad to devote some space to the varied means employed by German cities for the encouragement of harmless recreation and for the promotion of physical culture. But it is enough to say that the German municipality, with its conception of responsibility for the sum total of the well-being of its people, does not disregard the fact that recreation is a necessity, and that in crowded cities the subject is one not to be left wholly to personal choice or private management.

Number of small parks and public gardens in different towns.

Recreation and physical culture.

In conclusion I have but to mention briefly the manner in which the German municipalities are responding to the most serious of all the responsibilities that they recognize. The conception now entertained in Germany of the community's duty toward the child, is a broader one than that which prevails in our American cities. The struggle for existence is more difficult in Germany than in America, though perhaps not harsher and probably less fiercely competitive. But at any rate the connection between edu-

Public duty toward the child.

cation and ability to earn a livelihood is far more intimate in Germany than here. Every thoughtful man in the empire has recognized the fact that the industrial and commercial as well as the military and political future of Germany depend upon the universality of the best kind of education. The German cities have been trying to make their school systems fit the necessities of their population. They have made elementary education universal and compulsory. They have introduced much manual training and physical culture into their school courses, and are many years in advance of our American cities in adapting the quality of instruction to the practical ends that common-school education ought to serve. In addition, they have amply provided for the higher education,—showing a preference, however, for schools which will furnish Germany with an abundant supply of men of special and technical training. Manufacturing cities like Chemnitz promote the development of their principal industries by providing trade schools which are adapted in their courses to the industrial character of the city or vicinity. The fresh and practical character of popular education in German cities owes very much to the fact that — in addition to the permanent school officials who supervise the entire educational system of any given municipality — there are numerous local school boards upon which a great number of competent citizens are asked to serve. This service is required upon principles similar to those which call citizens of character to the work of administering poor-relief. Thus in Berlin there are some thousands of reputable citizens who are responsibly and intimately connected with the city's educational system. Here again we find a safeguard against the mechanical and perfunctory tendencies of routine officialism. I am sure that, so far

Education and livelihood.

Special and technical training.

Citizens on school-boards.

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as elementary education is concerned, our American cities have more to learn from the methods and results attained by the German cities than we have to teach them. Our progress must be along their paths.

Municipal tax-paying.

The German citizen is a heavy tax-payer. Even if he were relieved from the great burden of imperial and State taxation which military exigencies impose upon him, his dues to the municipal government alone would be formidable enough. Land and houses are heavily taxed; the income tax is resorted to for municipal as well as for State revenue; and the whole population is made to contribute in various ways,— through indirect imposts upon articles of common necessity if not through direct taxes,— toward the cost of these highly-developed municipal organisms. Everywhere and always taxation in any form seems a grievance; and it is not strange that the German tax-payer should groan. But the other side of the picture is not unpleasant. The German tax-payer finds every pfennig of his money well accounted for. He sees everywhere about him the beneficent results of public expenditure carefully and wisely made. He perceives that through his membership in a municipal household which makes itself responsible for the well-being of the whole community, he is receiving benefits which, upon the average, are inestimably more valuable than any that he could have purchased for himself with the money he has had to contribute to meet the municipality's housekeeping bills. He is in no wise appalled by the nominal fact of large municipal indebtedness, because he perceives that almost the entire total amount of the municipality's obligations is represented by investment in productive enterprises. And these earning departments promise not only to pay their own way and repay all that they cost, but also give assurance of increasing prof-

What the tax-payer receives.

What the municipal indebtedness means.

its which may be confidently expected to liquidate much of the public indebtedness incurred on account of such non-productive services as that of free elementary education. The German cities possess tangible municipal property worth at market prices far more than their outstanding bonded indebtedness. Their financial position is absolutely unassailable. For their indebtedness they have much to exhibit. Their interest-bearing obligations represent foresight, enterprise, business shrewdness, brilliant investment, permanent progress in sanitary appliances, and a lifting of the standards of civilized life. Before criticizing the German municipal methods too severely, we might well analyze our American city debts in order to ascertain what investments they represent, and what testimony they have to bear concerning the thrift, foresight, and wise intelligence that have controlled our American municipal financiering in the past twenty-five years.

The municipal balance sheet.

## CHAPTER VII

## THE FREE CITY OF HAMBURG AND ITS SANITARY REFORMS

THE German cities in their municipal activities have not until late years been largely impelled by the sanitary motive. They have done wonderful things, and have shown a splendid capacity and business thrift. But while the public health has been the dominant motive in the development of the municipal functions of Glasgow and some other of the British cities, good financial results have seemed to be the chief criterion of success in German municipal government. The broad generalization is too sweeping, yet it is upon the whole a defensible one. While taking the lead of all nations in the scientific study of the problems of the public health, the Germans have not been the most eager people in the world to spend millions of money in the application of hygienic principles. Fortunately for them, they have the best scientific leadership that any country can boast, and at the same time they have by far the best administrative mechanism. All that had been needed, therefore, was the motive strong enough to open wide the public purse-strings. The last cholera epidemic appears now to have supplied it. All over Germany the learned doctors and bacteriologists have since 1892 been dictating terms to the awakened municipal authorities.

The sanitary motive in municipal activities.

Its awakening in Germany.

The experience of 1893 made it seem probable that the cholera could never again prevail in uncontrol-

lable epidemic form in western Europe or America. The kindred sciences of bacteriological medicine and public sanitation have, in these last years, grappled most brilliantly and effectively with the dreaded monster. Berlin, Paris, London, and New York have learned that they can hold the cholera firmly in check. And now the cities that have suffered most in recent years, such as Naples and Hamburg, are prepared to meet the scourge on its appearance, and prevent it from becoming widely epidemic or from interfering seriously with business. The unspeakable fright, therefore, which has heretofore attended the outbreak of cholera in western Europe and America is likely to pass away with the present decade; so that a sporadic case now and then will have no paralyzing effect upon the environing community.

Conquest of the cholera, 1892-93.

It is clearly fortunate, however, that Europe should have suffered these recent pangs of awful fear. The cholera is a sensational disease. Other maladies, preventable to a large extent by public hygienic measures, are far more destructive of life than the cholera. But their ravages are more insidious and more commonplace; and the warning cry of sanitary science acts tardily and feebly upon municipal purse-strings. A high average death-rate, due to bad sanitary conditions, is not ordinarily seen to disturb the course of trade, or to lessen greatly the life-chances of the burghers who pay the heavy taxes and control the public funds. But a cholera epidemic ruins business, impoverishes the comfortable burghers, and threatens to invade their domiciles and rob them of their first-born. It acts as the effective tenth plague, and the municipal Pharaoh bestirs himself mightily. Naples had long intended, in a languid way, to reform its sanitary arrangements, but not until the cholera epidemic of 1885 supplied the motive force was anything of much

Cholera as a sensational disease.

Effects of a cholera panic.

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importance undertaken. The improvements set on foot as a result of that epidemic have revolutionized the city, and will have resulted in the saving of many thousands of lives every year; for the principal effect of efforts to guard against cholera is to abolish, or greatly diminish, mortality from various other causes.

Results in Italy.

That epidemic at Naples led, further, to the enactment of a new sanitary code for the Italian kingdom, and to many excellent improvements in other Italian cities and towns besides Naples. Far more widespread throughout Europe, however, will have been the improved sanitary arrangements resulting from

In Germany.

the cholera invasion of 1892–93. And it is in Germany, doubtless, that the most important effects will appear.

Germany's progress in the health administration of cities is well illustrated in the reforms which have recently been accomplished at Hamburg. Between the years 1831 and 1873, Hamburg had suffered from fourteen visitations of the cholera. In 1892 it experienced a terrible cholera epidemic, but its new health methods

Hamburg's new sanitary methods as typical.

give good promise of future immunity. I propose, therefore, in this chapter to describe Hamburg's sanitary work somewhat in detail, as typical of the new national spirit and policy. For it is to Germany more than to any other country that the world is indebted for the most important new lessons not only in sanitary science, but also in the practical applications of new hygienic knowledge to the organized work of municipal government. There is very much in Hamburg's conditions and in its sanitary plans and undertakings that ought to interest the intelligent people and the officials of our American cities. But it may also be well by way of some prefatory paragraphs to give an outline sketch of Hamburg's general municipal character and governmental structure. Some

aspects of the political organization of this great seaport, Germany's second city, are hardly less worthy of attention than its improved health services. CHAP. VII.

Let it be said that Hamburg was most unjustly treated by the major part of the American press during the summer and autumn of 1892, and that most Americans retain an entirely erroneous impression concerning the city. Until late years it has been appreciatively known by comparatively few American visitors. Even the travelers who patronize the fine steamers of the Hamburg-American Company hurry on to Berlin, and learn nothing of this noble old Free Hansa town and magnificent port. In America it has been chiefly known as the place from which so many undesirable emigrants take shipping, and perhaps for that reason it has gained the reputation of being indescribably filthy, overcrowded, ugly, and uninteresting—a place, in short, to be avoided. No impression could be further from the truth. The emigrants go from Hamburg for the same reason that they land at New York: the one, like the other, is without rival as the greatest port of its continent. Ships go everywhere from Hamburg. Its dock and harbor arrangements excite the enthusiastic admiration of every intelligent visitor. There is no such sight elsewhere in the world. The Liverpool arrangements are far inferior. Within a few years there has been expended by the German Empire and the city of Hamburg a sum approaching $40,000,000 in the construction of this vast shipping terminal, the modern conveniences of which make everything along the New York docks seem absurdly effete and obsolete.

Hamburg's commercial character.

Hamburg is externally a more attractive and picturesque city than Berlin. The dull and somewhat cheap monotony of the huge new imperial capital is almost painful after a few days of Hamburg's variety

Hamburg as an attractive city.

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and charm. The city's architecture combines the modern with the medieval in the most delightfully unexpected ways. Many whole streets of the high-gabled, timber-framed, quaint-windowed houses of the old sixteenth- and seventeenth-century Hanseatic merchants remain in good condition; and yet the city as a whole is distinctly modern in its architecture. A great portion of its central area was swept by the historic conflagration of May, 1842, and there followed a rebuilding with regularized streets and modern structures. Far from being hopelessly congested and void of breathing-spaces, there are a number of tree-lined thoroughfares much broader than are to be found in leading American cities, while in the very heart of the city there are large water spaces and park areas, with extensive girdling promenades, and every facility for healthful outdoor recreation. These pleasure-grounds take the place of the old fortifications that had occupied a wide belt about the inner city. A dignified and splendid city is Hamburg, with its 600,000 inhabitants, its immense commerce with all parts of the world, its unusually intelligent merchant body, its suburbs of handsome villas, its modern growth and enterprise, and its fine traditions and history that bind it to a noble past.

Its streets and promenades.

Hamburg holds a political position which the city of New York might well envy. It is a city-state, and it has a government exactly adapted to its conditions. There is no meddlesome provincial government or departmental prefect to hold the Hamburg administration in tutelage, nor any separate and superior national executive or parliament to order its police affairs, supervise its finances, or legislate touching its constitution or any of its chartered powers. Hamburg is a constituent member of the German imperial confederation, just as Rhode Island is a member of the sisterhood of American States. And, like Rhode Island,

Position as a city-state.

it is for domestic purposes a sovereign republic. The citizen of Providence, Rhode Island, however, finds himself subject to the threefold authority of a municipal government, a county government, and a State government. His municipal affairs are constantly under discussion in the State legislature, which at every session enacts numerous special laws dealing with the administration of Providence. But the Hamburg government is one and indivisible. The law-making body is at once a State legislature and a city council. The executive organization fits the circumstances of a city-state. It is true that Hamburg is not wholly urban. Considered as a state, it holds a domain of 158 square miles,—an area slightly smaller than that of Chicago,—while Hamburg considered as a city comprises (by the new legislation of June, 1894) 7665 hectares, or 30 square miles. But whereas the city had 600,000 inhabitants at the beginning of 1895, all the rest of the territory possessed only 50,000 (in round figures), a large part of whom were in suburbs adjacent to the town. The domain of the Hamburg state is not all contiguous, a part of it lying at the mouth of the Elbe estuary, about 75 miles distant, with Cuxhaven as its port. But it may be estimated that a hundred or more square miles, or two thirds of the Hamburg territory, lie on the north bank of the Elbe within easy reach of the city, and constitute a domain about equal to the joint contiguous areas of Minneapolis and St. Paul. The outlying parts (*landbezirk*) are grouped in four *landherrenschaften*, or districts for local administrative purposes, and minor rural affairs are managed by a further subdivision into nearly forty communes or petty townships. But the main interests of the whole area belonging to Hamburg are administered and controlled by the central government, which also administers directly, on its own behalf, all the affairs of the city.

Legislature and city council are identical.

Area of state and city.

Administrative system.

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Concerning the government in general.

This central government is a somewhat complex structure, yet it is simple enough in its essential features. In the broad facts of a large elective council and a permanent executive magistracy, the Hamburg government is analogous to those of other German cities. The Hamburg system has marks of its own, however, growing out of the many-centuried and eventful history of Hamburg as a Free City—a leading member of that glorious Hanseatic League which dominated the Baltic and North Sea commerce of the middle ages, and which led in the struggle against feudalism of those new forces, gathering in the commercial and industrial towns, that were destined to usher in the modern order of things. Thus Hamburg as a city-state of the earlier period, when cities had so distinct a part to play, brings down to our new period of special and distinct significance for great towns much of its tradition of municipal greatness and power, and much transmitted capacity for a well-ordered town life.

Hanseatic traditions.

Membership and election of the "Bürgerschaft."

The Free and Hansa City of Hamburg (*Freie und Hanse-Stadt Hamburg*), as the republic is officially designated, governs itself primarily through a House of Burgesses (*Bürgerschaft*) composed of 160 members. Half of the body, 80 members, is elected by the equal suffrage of all male tax-paying citizens. Since taxes are due from everybody, only paupers or floating elements of population are disfranchised. The other half, however, is not so popularly elected. Forty members are chosen by the ballots of the house-owners of the city of Hamburg, and 40 by a special electorate made up in a somewhat elaborate fashion of judges and some other specified dignitaries of state, and of the members of certain guilds and corporate bodies. The Bürgerschaft as a whole thus represents the general citizenship on the one hand,

and the property and commercial interests on the other. Hamburg is peculiarly a city of merchants; and the men concerned with business in the harbor or in the Bourse give the town its administrative character and policy, and wield the weightiest influence in the Bürgerschaft. The burgesses are elected for six-year terms, and half of the body is renewed every three years. Acceptance and service are required by law of those whom their fellow Hamburgers elect to the Bürgerschaft.

A government dominated by merchants.

Executive control of Hamburg's affairs is vested in a body of eighteen senators, elected for life by the Bürgerschaft. Nine of these senators must have been educated either as lawyers or financiers,—finance (*cameralwissenschaft*) being a distinct science and profession in Germany. Seven of the remaining nine must belong to the body of Hamburg merchants (*kaufmannschaft*). A senator may not decline to accept the responsibility if chosen, but he may retire at the end of six years if he does not wish to serve out his life term. It is evident that the Hamburg Senate, while in many respects analogous to the magistracy of a city like Berlin, is a body of somewhat different character and traditions. It is less technical in its quality and more like the upper house of a general law-making body. It is not a group of highly salaried civil servants, but rather a board selected from the most competent and distinguished of the classes of citizens who give Hamburg its character as a great financial and mercantile center. In many matters the Bürgerschaft and Senate act together. The Senate selects from its own membership, for two-year terms, a burgomaster and a deputy burgomaster, one of whom presides over its deliberations. The Senate usually formulates matters of legislation, and submits its proposals to the burgesses, who are the constitu-

The Senate of eighteen.

Character of the body.

The burgomaster.

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Relations between Senate and burgesses.

tional law-enacting body. The Senate has a revisory and veto power, which, however, it cannot exercise in matters of revenue and taxation. Deadlocks between the two bodies are determined by a joint arbitration board; or, as a last resort when constitutional questions are involved, an appeal may be taken to the Supreme Court of the German Empire, which sits at Leipsic. The burgesses maintain a standing committee of twenty members whose duty it is to observe the whole course of administration and report to the full house.

The working departments.

The several bureaus of administration are organized and carried on under the Senate's direction, with a senator as the presiding head of each bureau. The Bürgerschaft and Senate coöperate in the appointment of citizen members of each administrative board. For example, the sanitary administration is under the direction of a board of health known as the *Medicinal-Collegium*, over which Senator Dr. Hachmann presides. Under control of this Collegium are the salaried directors of the various branches of the health work.

Health.

Public works.

Another senator presides over the *Bau-Deputation* (Board of Construction or Public Works), which has under its care the whole oversight of building operations, whether above ground or below, and which employs chief engineers, architects, chief inspectors, etc.

Police authority.

The *Polizei-Behörde* (Police Authority) forms another bureau of administration, with a wide range of duties and with control of the active police force.

Education.

Then one finds an educational administration, presided over by a senator and securing the coöperation of competent citizen members of elementary- and high-school boards. There is an *Armen-Deputation* (Charity Board) similarly organized, through which relief work, such as I have described as pertaining to the Berlin municipality, is carried on. A *Gefängniss-De-*

*putation* (Prison Board) has charge of penal administration, a *Quai-Verwaltung* and a *Hafen-Verwaltung* (Quay and Harbor Administrations) have control of various matters pertaining to the docks, harbor, and quays, a *Friedhofs-Deputation* (Cemetery Board) manages the municipal burying-grounds, and various other administrative boards, organized and working under the Senate's auspices and with a senator at their head, have charge of other governmental undertakings. Most important of all, perhaps, is the *Finanz-Deputation*, which administers the finances of the city-state.

Various other departments.

Here, then, one finds municipal home-rule in the fullest sense of the term, with no limitations whatever. Though attached by federal bonds to a monarchical empire, the chief members of which are four kingdoms, Hamburg is as unqualifiedly republican in its government as any Swiss canton or American State. It may change its constitution whenever it likes (a thorough revision was made in 1860, important changes were again accomplished in 1879, and minor ones were brought about in 1894) without consulting any external or superior authority. Such complete independence, of course, grows out of the fact that Hamburg is a state as well as a city; and however desirable a large measure of municipal autonomy might be for every other urban community, it is manifest that the state must preserve its sovereignty. It would be fortunate for a few cities, however, and particularly for the city of New York, if they could be erected into separate states, with a general law-making body of their own which would also perform the functions of a city council. The Hamburg constitution, with certain changes to suit the different circumstances, could be applied to the Greater New York with immense benefit to all the city's interests.

Hamburg's republican home-rule.

A position that New York might envy.

It should be remarked that Hamburg's position as

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Two other "free cities" in Germany.

Bremen and its government.

The Free City of Lübeck.

a city-state and a sovereign republic is not unique in Germany, but remains the fortunate heritage of two other cities, viz., Bremen and Lübeck. Frankfort-on-the-Main was also a free city until 1866, when it was annexed to Prussia. The free city of Bremen possesses a domain of 99 square miles, although the town itself comprises only 10 square miles; and of a total population approaching 200,000, nearly three fourths are found living inside the small city district. But, as in the case of Hamburg, the one central government suffices for city and state. Bremen's Bürgerschaft is a body of 150 members, of whom 14 are chosen by the class of citizens who have had a university education,— that is to say, by the members of the learned professions,— 42 are chosen by the enrolled merchants, 22 are chosen by the mechanics and manufacturing employees, and the remaining 72 by all the other taxpayers of Bremen, most of whom are unskilled workmen. The Senate, which as in Hamburg's case is the body controlling executive affairs, has 16 members, of whom 10 must be lawyers. The principal tasks of administration are assigned to 12 so-called ministries, over each of which a senator presides, and these are organized much after the fashion of the departments or executive boards of Hamburg. The "Free and Hansa City of Lübeck" is the third of these German city-states, and its organization is very similar to Hamburg's, although simpler in the fact that the House of Burgesses (120 members) is elected wholly by the equal votes of all the citizens, with no class preferences of any kind. The 14 senators are chosen for life, and their body must contain at least 6 lawyers and 5 merchants. Administrative organization is similar to that of Hamburg. Lübeck's whole domain includes 115 square miles, the town comprising about 12

square miles, with seven eighths of the total population. The town itself at the beginning of 1895 had nearly 70,000 people, the number having doubled since 1870; and the rural districts contained a stationary population of 10,000 or 12,000. CHAP. VII.

Finances of Bremen and Hamburg.

These three German free cities enjoy the advantages of a superb management of their financial interests by their ablest citizens. The debt of Bremen is nearly 100,000,000 marks — a large sum for such a city; but it represents investment in the magnificent harbor improvements and railway terminal facilities, and in the other advantageous public works, to which Bremen owes its general prosperity as the second German seaport, and as a great focus of international trade. The Hamburg debt in 1894 somewhat exceeded 327,000,000 marks. The recent harbor improvements account for a considerable proportion of the amount, while other needful and advantageous public works readily explain and fully justify all the rest of it.

The Elbe and the Hamburg water-supply.

Hamburg's very life has been the great river Elbe. But the Elbe, which has been its commercial mainstay, has brought death as well as life. The river has always supplied the city with water for drinking and domestic uses, and its unwholesomeness had long been fully confessed. But many things prevented, until recently, the firm attempt to solve the paramount sanitary problem of the city's drinking-water. Early in the seventies an elaborate investigation resulted in a report advising the filtration of the entire Elbe supply. But opposition arose, the discussion was protracted, and nothing was done. The inclusion of Hamburg in the new German Empire, and its accession at last to the German customs-union, led to the concentration of the municipal energy upon the development of the port facilities. The abandonment

Development of the port.

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of Hamburg's status as an independent port, and its inclusion in the tariff system of Germany, took practical effect in 1888, and the influence upon the city's traffic and growth was both immediate and very important. Meanwhile, the scientific consideration of the water-supply had not been altogether suspended, and the city's enhanced importance furnished a new reason for action.

The new filtration system.

In 1890 it was actually determined to proceed at once with the construction of an extensive plant for the filtration of a supply of Elbe water equal to the entire demand upon the water system for all purposes. Expert investigations, with reinvestigations and all sorts of cross-examinations, had resulted in a plan that was adopted with confidence. It was pronounced feasible by the municipal engineers to have the filtration plant ready for use in 1894. The cholera emergency led to prodigious efforts, and the new system was put into operation in May, 1893, nearly a year ahead of time.

The old supply of Elbe water.

The last seventy-five miles of the Elbe form an estuary of the North Sea, and the tidal movement up as far as Hamburg is considerable, amounting to several feet on the seaward side of the city. The Elbe flows northward; and the old waterworks were situated on the southern edge of the city, the intention being that the water should be pumped from a point in the stream that lay above the brackish and polluting influences of the flood tide. The intake was in the middle of the river, just opposite the large pumping-station, high water-tower, and adjoining reservoirs which constituted the old waterworks that served the whole city. As a matter of fact, the intake was not far enough up-stream to escape serious contamination from the recession, at flood tide, of the polluted water of the harbor and lower stream.

One must remember that the Elbe carries off the entire sewage of Hamburg; and that the stupendous aggregation of ships, of wharves and warehouses, and of manufacturing establishments makes the water of the port about as filthy as possible. The sewer system of Hamburg is by no means a bad one. The houses are all connected with well-built street-mains, which empty into several large *collecteurs*, or sewage-canals. These principal conduits in turn converge and join in one huge discharging sewer-tunnel, which is carried well out into the channel of the river, and empties at the lower edge of the city. The discharge is dammed in and held back during the hours of inflowing tide, so that the main harbor, and the numerous branching navigable *fleete* or canals, that make Hamburg something like Venice, may not be fouled and gradually filled up by subsidence from the immense volume of liquid filth. The sewer-gates are opened only when the ebbing of the tide joins with the ordinary flow of the river to give a sweeping current out to sea. This, at least, is a far better arrangement for sewage disposal than certain American cities lying on tidal water possess, which dispense with collecteurs entirely, and discharge their sewage at numerous points all along the river frontage.

The sewers of Hamburg.

Sewage discharged at ebb of tide.

But it is far from being a perfect system. For although the Elbe estuary is a broad stream, the cities of Hamburg and Altona have become so great that the combined volume of their refuse material is enormous; and the plan of discharging at ebb tide alone cannot wholly prevent the subsequent backflow of pollution from the sewers. Quite apart from any and all local sources of contamination at Hamburg, the Elbe water is by no means pure, for the river drains a populous valley, and has many large towns and villages on its banks. Hamburg ought long ago to

Contamination of the Elbe.

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have extended its intake far enough upstream to make perfectly sure that its citizens would not receive again through their water-pipes the fouled effluent of their drains. But at the time of the cholera visitation of 1892 the old intake was still in use, and was undoubtedly within the sphere, at flood tide, of harbor refuse and city sewage. An essential feature of the new water system, therefore, has been the extension of the receiving-tunnel up the river to a point some miles above the now abandoned intake. This work involved very large expenditure, since the new tunnel had to be constructed under the bottom of the river.

The new intake.

The filtration system, however, is the interesting feature of the new Hamburg water-supply. It is by far the largest and most successful "plant" for the removal of impurities from drinking-water that any city has yet instituted. It happens that Hamburg is so situated that it is practically compelled to draw its water-supply from the river. There are no mountain sources accessible. Naples, like Vienna and Munich and Glasgow, has been able to secure abundant water from high and uncontaminated mountain regions. But Hamburg lies in the lowlands, at the mouth of a broad valley. We have a number of cities in the United States that seem to be under the necessity for all time of drawing their water-supplies from the much-polluted rivers on the banks of which they are situated. For these cities the question of an effective method of filtration has the very highest consequence. From Minneapolis to New Orleans the cities of the Mississippi Valley are concerned. If the Elbe and the Rhine can be completely filtered, there need be little question about American rivers.

Treatment of river water.

A general description of the Hamburg system can easily be given. The city was fortunate in owning

The filtration system described.

two large islands in the Elbe, which have been connected by a narrow embankment, and which extend from a point near the old waterworks up-stream for a distance of about two miles. The uppermost of these islands, the Billwärder Insel, is the larger of the two. Somewhat further up the river is the new intake, with its well screened and guarded opening. The receiving-tunnel is perhaps ten feet in diameter. On this upper island have been constructed four large reservoirs, or sedimentary basins, as it might be better to call them, each of which has a capacity approximately equal to the supply of the city for one day. A new pumping-plant on the island lifts the water into these basins. The four are used in rotation. It has been found by experiment that the best results are attained by allowing the water to stand undisturbed for about twenty-one hours. Sluices and valves enable the basins to be used separately and successively. Thus, while Basin I. is engaged in feeding the filters that supply the city, Basin II. is full and closed for a day's deposit of sediment, Basin III. is being pumped full from the intake, and Basin IV., which is quite empty, is in process of being scraped and cleansed. When Basin I.'s supply has been drawn off, it in turn is closed for removal of sediment, Basin II. is put into connection with the filters, Basin III. is full and closed, and Basin IV., having been cleaned out, is again receiving a supply from the river. And so the rotation is complete. Each of these sedimentary basins has a superficial area of perhaps 25 acres.

The sediment basins.

The screens at the intake mouth of course keep out all large extraneous objects. The settling process in the great basins further disposes of fine sand, and of very much of the mud and silt that discolor the water as originally received. But from the hygienic point of view, it is obvious that nothing of very radical im-

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portance has been gained by the mere fact of a day's rest in a settling-basin. It is in the filtering-basins that the revolutionizing results are attained.

The lower island, the Kalte Hofe, lying just above the old waterworks on the east bank of the Elbe, at the Rothenburg suburb, presents a sight best seen from the top of the waterworks tower, and one quite worth the climb of 365 steps. One looks down upon an island perhaps three fourths of a mile long and one fourth of a mile wide, the greater part of which is covered with even rows of rectangular basins, each of which has a surface of 7500 square meters, or about two acres. There are 22 of these open filter-basins. To describe their mechanism in detail would involve engineering technicalities. It will be enough to tell in a general way how they are made and how they work. In principle they are not original. Sand filtration has been in use to some extent for many years. Altona, the flourishing manufacturing city of 150,000 inhabitants that lies solidly against Hamburg on the side toward the sea and is virtually part and parcel of the larger city, had for 30 years used sand filtration to make Elbe water potable. Berlin also filters through sand-lined basins a considerable part of its drinking-water. The London water companies have made successful use of the same system, and other cities have had some experience of this mode of water purification. The Hamburg plant on the Kalte Hofe is notable, therefore, not for the introduction of a new principle, but rather for the utilization of an old principle in a far more complete and successful working-plant than any other city has yet established, and for exact and novel demonstrations concerning the action of the filters upon disease germs such as were wholly unprecedented and are of inestimable value.

The filter-basins.

Filtration elsewhere.

Construction of filters.

The filter-basins on the Kalte Hofe, like the large sedimentary basins on the Billwärder Insel, are constructed with the utmost care, being lined very solidly with clay, concrete, hard brick masonry, and cement plaster. Across the floor of each filter-basin are many large pipes perforated with countless holes. The basin itself being ready, and the punctured pipes being in place, the process of filling begins. First comes a layer of small, well-selected stones, covering the floor to a depth of about eight inches. Then is spread, to a like depth, a layer of gravel — that is, of stones smaller than those forming the bottom stratum, but much coarser than the layer of coarse sand, also eight inches deep, that is next placed above it. Upon these three foundation layers is deposited the principal material of the filter, namely, a layer of fine sand, one meter (nearly forty inches) deep. When the filter is in use, the water stands exactly one meter deep on the meter of fine sand. Ingenious automatic regulators so control the inflow and outflow as to keep the water at an unvarying depth of one meter. It would be superfluous to attempt a detailed explanation of the admirable adjustment of all the parts of the water system to one another. It is enough to say that the pumping facilities are well adapted to the requirements of the sedimentary basins, that the filter-basins are nicely adjusted to receive and dispose of the quantity discharged from the Billwärder Insel, and that the arrangements of the old water-station on the mainland at the Rothenburgs-ort are fully equal to the reception of the purified effluent of the filters, and its distribution throughout the entire city.

Adjustment of the various parts.

It must not be supposed that this system, when once established, needs no further care or attention. The filters are all under constant inspection, and one by one they are cut off temporarily from active service

CHAP. VII. Cleansing the filters.

in order to be emptied into the river and cleansed. Adjacent to the group of filter-basins is an establishment fitted up with facilities for cleansing the sand and small stones. Ordinarily, it is found quite sufficient to remove a few inches of the fine sand for purification, leaving the rest of the filter undisturbed. It is not, indeed, desirable to take away all the deposits that the sand retains from the water as it trickles through. A certain amount of "scum" must be collected before the filter is at its best. It must be remembered that the chief purpose of the filter is the removal of microbes, whose existence can be ascertained only by bacteriological tests. These bacilli are so minute — as we laymen are assured by the learned scientists — that myriads of them would not feel themselves crowded on the point of the finest needle. A bed of ordinary sand and gravel could therefore hardly be expected to filter out the microbes as if they were so many crawfishes. The bacteriologists tell us that it is the scum, collecting on the sand and filling the interstices between the stony particles, that somehow manages to detain the microbes while the water passes on purified and wholesome.

Sifting out microbes.

A matter of precise knowledge.

Let no one suppose that this is a mere matter of conjecture, or of an occasional test with dubious results. The effect of the Hamburg filtration upon the bacteriological condition of the Elbe water is a subject of constant examination and precise knowledge. The whole system, during and after the summer of 1893, was operated with reference to the fact that the Elbe had been discovered to contain cholera germs, and that Hamburg proposed to give its people a water free from those germs. To this end, a municipal bacteriological laboratory was established, and to its director was accorded an almost dictatorial authority. At the time of the epidemic in 1892, the distinguished author-

ity Professor Gaffky, of the University of Giessen, came to Hamburg to assume temporary charge of sanitary arrangements. He brought with him from Giessen, as his assistant, and left behind him in control of the new Hygienic Institute, a young American bacteriologist, Professor Dunbar. Dr. Dunbar very rapidly and effectively developed the Hamburg municipal laboratory into one of the most important in the world, and gave it a practical relationship to health conditions that the authorities of Hamburg could not fail to recognize. Dr. Koch came later from Berlin, on behalf of the imperial government, to aid and advise in the struggle to subdue the epidemic, and he was surprised and delighted to discover the rare scientific quality and the comprehensive scope of the work Dr. Dunbar had already accomplished. Dr. Koch thereupon acquiesced very heartily in the proposal that Dr. Dunbar should be given the permanent post of director of the Hamburg Institute, and thus made the authoritative expert in control of the health conditions of the principal German port and the first commercial city of the Continent. Dr. Dunbar is a native of St. Paul, Minn.; and when he went to Germany, some years ago, at the age of twenty-one, he could speak English only. In order to accept the official post he now holds, he was obliged to become naturalized as a German citizen.

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Dr. Dunbar and the Hygienic Institute.

Dr. Dunbar commands the services of a staff of expert assistants, and his Institute conducts many experiments of extraordinary interest. A new method for the discovery of cholera germs in water was devised by him and accepted by Dr. Koch and the other bacteriologists as a great improvement. During the summer and autumn of 1893, the Hamburg Institute tested the Elbe water from day to day,— the specimens being taken from widely separated points,— and found chol-

Cholera germs in the Elbe.

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era germs all the way from the mouth to places far in the interior of Germany. Dr. Dunbar seems to have succeeded in proving effectually — what has hitherto been much doubted and denied — that cholera is propagated by means of water rather than air.

Remarkable effect of filtration.

In the filthy water brought up to Hamburg by the flood tide Dr. Dunbar and his group of experts were quite regularly finding from 30,000 to 100,000 cholera germs to each cubic centimeter (about one sixteenth of a cubic inch) of water. As many germs were found in the season of 1893 as in the previous year, although Hamburg was kept almost free from fresh outbreaks of cholera. The water of the river above the influence of flood tide was found to contain from 400 to 1200 germs. In July, 1893, the imperial health authorities at Berlin issued a warning to the municipal governments of the country not to supply their citizens with a drinking-water containing more than 100 cholera germs to the cubic centimeter. It was considered that water infected to no greater extent could be used without serious danger. It is highly instructive, therefore, to note the fact that the purified water of the new Hamburg filtration-works, as examined from filter to filter and from day to day, was found sometimes to contain no germs at all, and more commonly to contain from four to ten germs per cubic centimeter. Only by the most refined methods, never employed until the summer of 1893, could these few scattered germs be discovered, isolated, and accurately counted.

Here, then, is the great triumph of the Hamburg filtration-works. The citizens know absolutely that the new system has given them a safe supply, and feel that science is now equal to any emergency that may arise. The purified Elbe water is used for all city purposes, including street-washing, lawn- and garden-sprinkling, and sewer-flushing. It is of excellent

quality for all industrial purposes, and as a drinking-water it is agreeable as well as safe. CHAP. VII.

An indirect evidence that the cholera epidemic was induced through the use of Elbe water was furnished by the fact that the parts of Hamburg which use wells instead of the river-supply were almost or quite exempt from the disease. There are perhaps 800 or 1000 wells in use within the city limits. On general health principles wells are to be condemned, and their extermination by most city governments has been fully justified; but, as a choice of evils, the Hamburg wells were better than the unfiltered river-water, and so they were tolerated. Some of the large breweries have very productive artesian wells. At the time of the epidemic their water was piped to many neighboring houses, and the service was afterward continued. At that time also, in the fall of 1892, more than a hundred new "driven" wells were made; but many of them could not be used, on account of the mineral constituents of the water. A part of the work of Dr. Dunbar's Hygienic Institute, in the fall of 1893, was the thorough examination and testing of all the wells of the city. The health authorities were, of course, empowered to close all wells found to be yielding unwholesome water. Use of wells in Hamburg.

The Hygienic Institute has a branch laboratory, with every needed convenience, immediately adjacent to the filtration-works; and one of the large filters is used exclusively for the Institute's tests and experiments. One of Dr. Dunbar's chief assistants is stationed constantly at the waterworks. There has been constructed for Dr. Dunbar's use, upon plans of his own, a novel steam craft, to ply on the Elbe as a floating bacteriological laboratory. The boat is about forty feet in length, and its remarkable equipment will make it possible to study far more fully than has yet A floating laboratory.

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been done the actual extent and nature of the influence of flood tide in the Elbe, and also to give frequent attention to the health conditions of the great stream in its upper courses. All these new projects and devices will have cost a good deal of money; but shrewd, commercial Hamburg has come to the conclusion that improved sanitary services are a highly profitable investment, and that it would be as unwise to spend large sums upon such services without expert scientific direction and experimentation as to erect public buildings without good architects, or invest heavily in docks and harbor facilities without the aid of civil engineers. Dr. Dunbar is evidently determined to make the largest possible use of the city government's new impulses toward the generous support of hygienic inquiry and reform.

Expert sanitary knowledge as a good investment.

The circumstances under which cholera again appeared in Hamburg about the middle of September, 1893, only serve to illustrate the value both of the filtration-works and of the Hygienic Institute. Tests made at that time showed the alarming increase of germs in the filtered water as conveyed for consumption. It was further discovered that the water was pure as it left the filters, and that the contamination was the result of a bad leakage from the Elbe into the tunnel which conveys the supply from the Kalte Hofe to the pumping-works on the mainland. The leak was at last suppressed, but, unfortunately, a number of cases of illness and death occurred, clearly traceable in origin to this infusion of unfiltered water into the purified supply. The fact that Hamburg had been exempt from cholera all summer, while the river was laden with such deadly infection, speaks volumes for the filtered water which had been in use since May; and the prompt discovery of the leakage was a new demonstration of the practical usefulness of an efficient

A demonstration in 1893.

bacteriological laboratory. The Hygienic Institute, meanwhile, does not exist solely to fight cholera epidemics. Bacteriology has various services to perform constantly in the aid of the health authorities of cities. It can turn its attention from one form of infectious disease to another, and can help in many ways to promote wholesome conditions in general.

General usefulness of the Hygienic Institute.

I have already commented upon Hamburg's sewers and its disposal of sewage. It remains to speak somewhat of the scavenging and cleansing of the city. The cholera outbreak seems to have resulted in a vast increase of energy in the conduct of the work. Street-cleansing, under the general control of the police authorities, is managed upon a good system with admirable effect. No American city, so far as I am aware, can compare at all favorably with maligned Hamburg in the matter of clean streets. Good paving is the rule, and this of course facilitates the constant washings and sweepings to which the streets are subjected. Asphalt and smoothly laid square stone blocks are the prevailing material of the street surface. Besides the thorough night cleansings, there is a day force of sweepers regularly at work on the principal thoroughfares to remove horse manure, etc., quite in the approved manner of Paris and Berlin. Every main street has its entire and radical cleansing as often as once in twenty-four hours, and all other streets, no matter how quiet and little used, are carefully swept and cleansed several times a week. The sprinkling in summer is no less thorough, while in winter the removal of snow and ice is so efficient and prompt as to be noteworthy. In all details the public cleansing and street maintenance have been vastly improved since 1892, with the deliberate sanitary motive.

Cleansing and scavenging.

Good street-paving.

Effective street work.

The city also laid energetic hands upon the question of the disposal of domestic refuse. Garbage had

Garbage.

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hitherto been carted out and dumped upon land in the vicinity of the city, some kinds of refuse, however, being carried out to sea in barges. Since 1893 the garbage has been burned, large municipal crematories having been constructed. There is no reason why Hamburg should not establish a factory, such as one finds in various European cities, for the preparation of a marketable fertilizer and other salable commodities, from the collected garbage, street-sweepings, ashes, and waste material in general of so great a city. This will probably be done in the early future.

Disposal of refuse.

The fright to which the cholera subjected the population has been of inestimable aid to the sanitary police in their efforts to compel the people to maintain domestic cleanliness. There remain in Hamburg many of the very narrow, badly lighted streets of the middle ages, with small-windowed old houses, ill arranged for subdivision into tenement apartments and for the occupancy of numerous families. Obviously, it is no easy task to keep these streets free from conditions favorable to the spread of infection. But a wonderful improvement has been made, under rigidly enforced sanitary regulations, in the average wholesomeness of domestic life among the working-people. The whole code of regulations concerning the building and occupancy of houses could not well be revised in a day as an emergency measure, for too many far-reaching considerations were involved. The Hamburg building code had been made over in 1882; but now it was perceived that its thorough remodeling would be necessary, with a view to many sanitary improvements. Some reforms, however, could not be delayed; and in April, 1893, a series of brief amendments to the building code of 1882 was adopted, to remain effective until a deliberate treatment of the entire subject could be had. The size and form of interior court areas

Housing conditions.

Reform of the building laws.

were prescribed, with stricter insistence than before upon opportunities for light and air. Sanitary plumbing arrangements in tenement-houses were explicitly required. Most important of all, the occupancy of cellars and basements for residence purposes was made subject to greatly needed regulations. The census of 1890 had shown that 36,542 people in Hamburg were living in cellar dwellings — 6½ per cent. of the total population. In 1885 the number had been 31,381. Special attention had been called during the cholera season to the extraordinarily high rate of mortality in these damp subterranean abodes. To abolish cellar dwellings peremptorily and immediately in a city like Hamburg is, unfortunately, a practical impossibility. Even in Berlin, with its enlightened sanitary rules and methods, there were 117,702 cellar occupants in 1890,— 7⅜ per cent. of the entire mass of Berliners; and Altona, which is actually a contiguous part of the Hamburg metropolis, afforded nothing better than cellar homes for 8.7 per cent. of its people. Of cellar residences it is always to be understood, however, that some are much worse than others. It is the object of recent sanitary enactments in Europe to prohibit the residential use of the worst classes of cellars. Thus the new Hamburg rules prohibit the occupancy of cellars under houses that do not front upon the street. Cellars in the low parts of the town near the Elbe and other waterways must not be inhabited. Formerly cellars of considerable depth and very badly lighted were to some extent occupied for living purposes. But the rule of April, 1893, declares that the cellar floor must not be more than one meter (about 3 feet and 4 inches) below the level of the surrounding ground, while special provisions are also made for the best possible admission of light and prevention of damp floors. These regulations apply to cellars and

Cellar dwellings in Hamburg.

Compared with Berlin and Altona.

The new Hamburg rules.

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basements that are used for workrooms or domestic kitchens, as well as to those that are occupied as dwellings; and in all such cases there must be a sewer in the adjoining street, with which proper connections have been made.

One-room dwellings.

Apart from the cellar residences, the overcrowding of families in one-room apartments remains a serious evil in Hamburg, and one that will call for future legislation. But the average housing conditions tend to improve very visibly.

Hospitals for isolating infection.

The epidemic of 1892 found Hamburg ill prepared with facilities for the isolation of cases, and for the disinfection of contaminated articles and houses. Ordinary hospitals had to be used for cholera patients, and extra accommodations had to be provided by means of hastily erected emergency barracks in all parts of the town. Meanwhile, a vast new epidemic hospital on the pavilion plan was projected, and it is now completed and in working order. It is one of the largest and best appointed hospitals for infectious diseases to be found anywhere; and it will play an important part in the future suppression, at the very outset, of threatened epidemics. Urgent necessity, moreover, led to the organization of an excellent transport service for the removal of patients from their homes to the hospitals; and this has been put upon a permanent basis with very superior appliances. It will be found as useful in helping to check the spread of other maladies as in times of cholera outbreak.

Transport service.

Disinfection stations.

The disinfection stations, also, are a new feature of Hamburg's sanitary administration, and they are excellent specimens of establishments of that sort. Two central ones were fitted up in existing buildings adapted for the purpose, while a much larger and more complete one has since been made ready for

use. They are equipped with large ovens for the disinfection by heat of bedding, clothing, draperies, carpets, etc., and have facilities for the detention and personal disinfection and cleansing of the unattacked members of a family whose house is undergoing disinfection after the stricken members have been removed to hospital or to cemetery. The disinfection station is headquarters for the closed vans that are sent to remove persons and infected articles, and also for the disinfection officials whose task it is to take charge of a house and put it in good sanitary condition. Each one of these officers is supplied with a compact, portable metallic box, in which there is a curiously complete collection of scrubbing-brushes, chemicals, and implements and devices for the thorough cleansing of a condemned habitation.

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The staff of disinfection officials.

Food examination lies within the scope of Dr. Dunbar's municipal laboratory, and a staff of assistants is steadily engaged in this branch of the work, which has taken on some important developments. The milk-supply of Hamburg, in particular, has now been brought under the close municipal oversight that is so desirable in all large towns, a very elaborate law to that end having been enacted in April, 1894, after more than a year's inquiry and deliberation. Nothing could better illustrate the deliberate and permanent nature of the new sanitary activity of the Hamburg authorities than the manner in which they have dealt with this question of the regulation of the traffic in milk. Undoubtedly, under present conditions, the importance to a city population of a pure and wholesome milk-supply is surpassed only by the importance of a pure and wholesome water-supply. The new rules begin at the very source of supply,—regulating the care of cows on the farms, requiring cleanliness in the stables, ordaining that the milker's hands must

Food inspection.

Overseeing the milk-supply.

Sweeping nature of new rules.

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always be washed as well as the cow's udder, and in other details fixing a standard none too fastidious yet altogether novel to the average dairyman. The standards for specific gravity and for percentage of cream are rigidly fixed, and the penalties for watering or other adulteration are severe and certain. The cleanliness of the milk-shops and utensils of distribution in the city are as carefully prescribed as the conditions on the dairy farms. The general result can but be visible in the improved health of the Hamburg children.

Cleanliness required in beer-shops.

A more novel but — for a German city — hardly less desirable sanitary intervention is embodied in the rules issued by the police authorities of Hamburg in August, 1894, regarding the sanitary condition of the apparatus used in public-houses and refreshment places which keep beer on draught, and also in the minute prescription of rules for the cleansing of the vessels from which the guests of such houses drink their beer or other beverages. The German bacteriologists had discovered a real source of danger in the transmission of disease germs by means of imperfectly washed beer glasses, mugs, and pewters; and Hamburg now prescribes a daily scalding and scouring, besides the rinsing with pure running water after each emptying of the vessel. Do these seem trivial matters, beneath the dignity of the public authorities of a great city? The wisest men think otherwise. They know of no better possible use to make of the police power of government than to prevent the transmission of deadly disease germs in places of public resort through culpable negligence of enlightened health rules. It is quite as permissible a police function to see that beer-venders keep their glasses clean as to prevent brawling and violence in the streets — and in practice a far more important one to

A new use for the police power.

the social well-being. Of course I use the term police function in its broad sense. Bacteriology is fast changing the practical character of the tasks of intervention that have to be exercised in the name of the police authority of the state, as it supplies us with new knowledge; so that Hamburg now concerns itself with seeing that dairymen wash their hands before milking, and that saloon-keepers scour their tankards, while the sanitary inspector and the disinfection officer are more important by far than the night-watchman or the ordinary patrolman.

Bacteriology is changing the practical tasks of government.

There had been a chemical laboratory for public purposes under the police authority of Hamburg for a long time; but this was metamorphosed into the Hygienic Institute in 1892. It has since been found convenient to create a new chemical laboratory, with commodious quarters in the City Hall, to relieve the Hygienic Institute of the many hundreds of ordinary tests and analyses that the business of food inspection requires. The special and critical inquiries, involving more difficult processes, are undertaken by the Hygienic Institute; while the chemists who have their station in the Town Hall coöperate constantly in the daily work of the officers of food inspection who are busy in the markets, in the great new municipal abattoirs, in the milk-shops, in the beer-halls and drinking-places, and wherever articles of food and drink are sold to the Hamburg public.

A new chemical laboratory.

In the spring of 1893, as a part of the new health system of the Hamburg authorities, there was established a harbor sanitary service, with a chief medical officer, assistant physicians, and a staff of inspectors. Steam and naphtha launches were provided, and an active examination was begun of the health conditions of all the ships and floating craft that came into the port. The inquiry included the health of persons on

The harbor sanitary service.

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board and the cleanliness and sanitary arrangements of the vessels. In the year 1893 there were made to sea-going ships not less than 22,640 visits, and to river and canal craft 42,867 visits, the aggregate number of persons on board being 468,000,—the whole number of people being added for each examination made. Apart from the discovery each year of some hundreds of cases of illness requiring removal to hospital, this new harbor health service is making itself particularly valuable by reason of its successful efforts to improve the sanitary conditions of emigrant-carrying passenger ships, of the quarters occupied by the crews of freighting vessels, and of the inland craft which provide the only home of thousands of families.

Important results.

Finally, in January, 1895, there came into force a new *Ärzte-Ordnung*, a code of rules and regulations touching the practice of medicine in Hamburg, and defining the duties of the entire medical profession with respect to the report of cases of infectious and contagious diseases, of deaths, and of births, and otherwise bringing the private practitioners into relations of more efficient coöperation with the public health authorities. These regulations are of an advanced character, involving some new methods, and their benefits will be felt in many directions. The scheme, among other things, requires the medical practitioners of Hamburg to form themselves into a body and elect a Chamber of Physicians (*Ärzte-Kammer*) composed of fifteen members. This Chamber will appoint three of its members to represent it in the Medicinal-Collegium (the public Board of Health). The Chamber will also deliberate and advise when questions are submitted to it by the health authorities, and in various ways will bring its expert knowledge and ability to the service of the public administration.

New rules for practice of medicine.

Arrangements for coöperation in aid of public health.

It is as yet quite too soon to attempt a conclusive presentation, in the form of vital statistics, of the results of Hamburg's new sanitary régime. But the evidence afforded by a comparison of the death-rate is highly significant, and it would have an importance even sensational in its character if the improvement it indicates should, happily, continue permanently. It would seem that the death-rate has declined fully 20 per cent. from the average of the preceding decade, since the extraordinary precautions of the cholera summer of 1892 were put into effect. It is not to be forgotten that a great epidemic almost always sweeps away so many very old, very young, and otherwise specially susceptible persons that a subsequent lowering of the death-rate would result without any aid from better hygienic surroundings. But when due allowance is made for this very important factor, it would still seem reasonable to attribute a considerable part of the reduced death-rate of Hamburg to the city's improved sanitary condition. Taking the period of thirty years from 1865 to 1895, Hamburg's average death-rate has declined from 30 or more per 1000 per annum to 20 or less. And this has been accomplished in the face of a very rapid growth of population, a development of the port as a great international rendezvous, and the rise of an enormous emigration movement which has assembled at Hamburg about a million persons per decade, many of them ill-conditioned Russian peasants. There will remain much to be done in the future, particularly in the improvement of the housing conditions of the poorest third of the population. But with hygienic science pointing the way to practical reform, there will be no retrogression, but rather a constant progress.

Testimony of the death-rate.

Encouraging prospects.

## CHAPTER VIII

## THE TRANSFORMATION OF VIENNA

Vienna's remaking since 1860.

IF comparisons were not of so little meaning unless supported by ample and precise details, I should be tempted to assert that the metamorphosis of Vienna since 1860 has been more remarkable in its extent and completeness than that of any other important capital or great commercial town of Europe or of the world. From the point of view of commerce and private enterprise, certainly the rebuilding of Chicago and its general progress since the great fire of 1871 would have precedence. But when organized municipal and social advancement as well as physical transformation and expansion are considered, Vienna would seem on many accounts to be the world's most notable example of a splendidly appointed metropolis rapidly evolved through the adoption of modern ideas and principles.

Compared with Chicago.

What Chicago might have done.

If the municipality of Chicago, after the fire, had purchased the whole tract that had been swept clear of buildings, and had proceeded to lay out an adequate central district, with suitable spaces for public buildings, with parkways and public gardens, with a broad inner boulevard circle or ring-street, and with a series of avenues radiating from the ring-street like spokes from a hub, it would have been entirely feasible to sell the available building sites fronting on this ideal system of central open spaces and main distributing arteries for sums large enough to

repay the entire outlay, and perhaps also to erect a few monumental buildings on the grounds reserved for public edifices. Chicago's glimpse of architectural glories came with the transient structures that made up the "White City" of the Columbian Exhibition. But on the *tabula rasa* of 1871 there might have been reserved at the very core of the city a zone of garden spaces in which, gradually, a series of municipal, county, State, and national edifices could have been erected, together with such monumental structures as private beneficence or citizens' associations might choose to build for libraries, science and art museums, special educational purposes, auditoriums, academies of music, or commercial exchanges. Since the marvelous creations of 1892–93, Chicago has had a clear comprehension of the magnificent effects that may be produced as the result of a large initial plan which arranges public edifices with reference to their relations to one another and their general surroundings. Chicago is inevitably creating its series of monumental public edifices; but they can never be effectively grouped, with a due environment of open spaces and park effects, as they might easily have been if the strenuous conditions of 1871 had permitted the exercise of a wise forethought, or even if the contemporary experiences and policies of the great European towns had been half understood or appreciated in America. The great fire of London had come too early by several generations; and the modern art of city-making played little part in the reconstruction.

The lesson of the "White City."

Chicago's public buildings inevitably scattered.

But Chicago had the greatest opportunity that has come to any city of magnitude in our times, and that opportunity was not improved. The next best opportunity that has come to any modern city fell to the lot of Vienna; and it is the chief part of my task in this chapter to tell in a summary way how effec-

Vienna's opportunity was improved.

CHAP. VIII. tively that opportunity was seized, and how wondrously the city has been transformed through the many-sided impulse to progressive undertakings that grew out of the plans adopted for building the new metropolis. I would not for a moment disparage the new Chicago, that marvelous product of private initiative and commercial energy. Yet the contrast it makes when compared with the new Vienna — which owes its character wholly to governmental and municipal policy, direction, and vigor — is for my purposes too instructive to be ignored. It would be gratuitous to offer much censure or praise in the case of either city. One is great chiefly through the agency of its governmental organs. The other is great through the indomitable force of its private citizens as individuals or in various associated capacities. Each has manifested its own genius. But it is evident that Chicago would have been the gainer if it could have borrowed some of Vienna's genius for municipal action.

Vienna the result of governmental initiative.

It was the political upheaval of 1848 and the events immediately following that prepared the way for the new order of things in Vienna. The medieval municipal liberties had long been lost, and the citizens were practically without voice in the management of their town affairs. But with the accession of the young monarch Francis Joseph I. to the imperial throne of Austria in 1848, a new era dawned. The country was granted a liberal constitution. Vienna was named in that constitution as the seat of government and the residence city of the sovereign. This act was soon followed by the gift to the city of a municipal constitution which reëstablished the local autonomy on a broader basis than any of the medieval charters had afforded,— this new constitution being embodied in an imperial statute of March, 1850. It was not,

The era of Francis Joseph.

Municipal self-government.

however, until after 1860 that the new municipal government entered upon a fully organized career. It engaged the interest and secured the zealous service of the best men in the professional and commercial life of the city, and they have brought its ordinary administration to a high state of efficiency, while carrying out extraordinary undertakings with the most brilliant success.

The tax-paying qualification.

It must not be supposed that municipal self-government for Vienna has ever meant any such thing as universal suffrage. A tax-paying qualification has always excluded the great mass of common laborers. The minimum, which had previously been higher, was in 1885 reduced to five florins. This limitation, together with that which requires that voters shall be twenty-four years old, admits to the municipal suffrage about one person in twenty-five of the population, and excludes more than three-fourths of the adult men. Thus the Vienna electorate is a body of about sixty thousand voters. Regardless of tax-paying, the law admits various classes of citizens by virtue of their professions and occupations. First, however, comes the list of men who hold the traditional "burgher right" of Vienna — a distinction that no longer carries with it much practical significance. By virtue of their callings are admitted: (1) the clergy and all religious teachers; (2) high officials, active or retired, of the empire, the province, or the city; (3) military officers and certain others connected with the army; (4) lawyers, doctors, and pharmacists who have been duly graduated; (5) civil engineers, architects, and other graduates of technical and special high schools; (6) professors and schoolmasters of all ranks. These personages, together with the citizens who pay at least five florins of direct taxes, make up the body of voters. But even this select body — about

Educated men enrolled.

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The three-class system.

sixty thousand men out of a total population approaching a million and a half — is subdivided into three classes of very unequal membership, though of equal power. The first class is composed of the taxpayers who pay a tax of at least 200 florins, the second class includes those whose tax payment is not less than 30 florins, and to the third class belong all the other voters. This Austrian plan does not produce so great an inequality among voters as the Prussian system, which gives a third of the power to the men who pay a third of the taxes. But it makes the vote of a member of the first class worth three times as much as that of a second-class voter, and nearly nine times that of a voter of the third class.

Method of electing council.

Thus, assuming that the Vienna electoral rolls contain 60,000 names, we may in round figures estimate 4500 as in the first class, 14,500 in the second, and 41,000 in the third. Vienna is divided into nineteen permanent districts — *bezirken* — which bear an important relation to the carrying out of all administrative work, and which are also election districts. The voters of each class in a given bezirk are enrolled as a separate *wahlkörper*, or voting body. Each wahlkörper directly elects its own share of the members of the municipal council. The Vienna council is a body of 138 members; and to each bezirk is assigned a number of representatives that is divisible by three. Councilors are elected for six years, and one third of the body is renewed every two years. Thus, a bezirk which is entitled to nine members will have three places to fill at every biennial election, and the voters of each wahlkörper will elect one member. The three bodies vote on different days. For example, in a recent election the third-class voters in each bezirk chose their councilors on October 22, the second-class voters assembled on October 25, and the first-class voters concluded

Six-year terms, and renewal by thirds.

the election on October 29. It cannot be said that this three-class system commends itself seriously to the people of Vienna, and some day a democratic wave will sweep it away. It is not approved even by those who belong to the two higher categories; but the state has been unwilling to grant the municipality so democratic a measure as a uniform suffrage for local purposes, because there would inevitably ensue an agitation for electoral reform and equal suffrage in elections to the Landtag of Lower Austria and the imperial Reichsrath.

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Three-class arrangement not approved.

The electors of one class in Vienna not infrequently choose as their representative in the council some citizen of their bezirk who belongs to another class; and thus the threefold division does not make the municipal government as aristocratic as might be supposed. If, however, one cares to use the word aristocratic in its original and etymological sense, it may fairly be applied to the municipal parliament of Vienna, for the gemeindesrath of 138 members is a body of citizens possessing, upon the average, a very superior qualification for their public duties. As in the Berlin council, some of its members are university professors — political economists, publicists, or scientists of eminence; and, as in the London county council, some are statesmen of national or international repute. But the majority are business men. The council is a deliberative body, in full control of the general affairs of the city, including its finances and all its plans and policies. Its sessions are frequent and open to the public, and its members are not paid. It carries on its work through standing committees, as is usual with such bodies.

Character of Vienna councillors.

Its business is largely influenced and directed, however, by the burgomaster, who is its presiding officer and is chosen by the council from among its own

Burgomaster and assistants.

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members for a term of six years. A first and a second vice-burgomaster are also named for three-year terms. Further than this, the council selects twenty-two of its members who with the burgomaster and the two vice-burgomasters form a *stadtrath* of twenty-five members. This smaller body is in effect a large standing committee of the full council whose business it is to carry on the administration in matters of practical detail. Thus while the full council creates offices to be filled, the smaller stadtrath selects the appointees. It reports everything that it does to the large body, and the burgomaster is always its leading spirit.

The "stadtrath."

The executive work of the municipality is carried on by the expert permanent officials who constitute the salaried department chiefs and are collectively known as the magistracy. The burgomaster stands at the head of the civil service, and the magistrates, as in the cities of Germany, form a magisterial council under his direction. But this body has less initiative than the magistracy of Berlin or the other German cities, and it concerns itself rather with efficient executive work than with questions of municipal policy. Thus the Vienna system with some modifications might readily be adopted in England or America, whereas the Prussian system could only with difficulty be adjusted to the conditions of the English-speaking countries. In England the aldermanic element of a town council could assume the duties of the Vienna stadtrath on a moment's notice; while the town clerk, the medical health officer, the borough surveyor (chief of the public-works department), and the other important officials and superintendents of departments would form a magisterial corps under the mayor's direction. The Vienna burgomaster, like the mayor of a French town, is the real head of the local administration, and is a personage of executive

The executive magistracy.

Vienna system more applicable to England or America than Berlin system.

Position of the burgomaster.

authority, in which respect he differs from the English mayor. But, on the other hand, he is not a professional civil servant like the burgomaster of a German city, but rather a citizen magistrate, first elected to the council by his fellow-voters, and then made burgomaster by his fellow-councilors. He is provided with a residence in the City Hall while he holds the post, and is remunerated to whatever extent the council may choose to vote him allowances, the office not being a salaried one.

The nineteen districts as established in 1890.

Before 1890 Vienna consisted of ten districts or bezirken. In that year a great suburban belt was annexed, and a rearrangement of the divisions was made. There are now nineteen. The constitution of Vienna attaches a high importance to these districts, and their boundaries can be altered only by an act of the Austrian parliament. In the opening chapter of this volume I have commented upon the advantages of the permanent arrondissements of Paris for the purpose of localizing administrative work and bringing the more common functions of municipal government as near as possible to the people. The bezirk in Vienna is still more strongly marked and individualized than the arrondissement in Paris. Each division has a *bezirksausschuss* (district board), consisting of eighteen members elected for six years, each of the three classes of voters in the district choosing six members. Each district board chooses a chairman or superintendent. The board has not a wide range of discretion or authority; nevertheless it is useful in many ways. It concerns itself with the efficiency of municipal work in its district, and affords an influential means through which the needs of a particular locality may find expression. The burgomaster has the right of the floor in all the district boards, and members of the stadtrath often attend

Emphasis given to neighborhood administration.

Bezirk institutions.

CHAP. VIII. the local meetings. There are municipal buildings in the different districts, in which are maintained the branch offices of various public services and executive departments.

Each provincial diet of Austria makes local-government laws.

It would not be easy to give in brief outline the principal features of local and municipal government for Austria in general, because each Landtag or Diet of the sixteen provinces which make up the Austrian half of the Austro-Hungarian monarchy is competent to create its own system. Thus the Diet at Prague controls the Bohemian system, and the legislature which meets at Brünn has exclusive authority over the local-government arrangements of Moravia. The provinces as a rule have established systems which classify communes by their population and provide uniform institutions. Lower Austria makes an exception of Vienna, which requires special legislation from time to time. But apart from one or two other towns which have special charters, all the localities of Lower Austria are subject to the rules of the general municipal code, which provides for the election of councils and grants a very considerable measure of local home-rule. It is sufficient for present purposes, so far as Austria is concerned, to devote our attention to the municipal structure and achievements of Vienna.

Lower Austria's system.

The old Vienna and its girdle of fortifications.

When Francis Joseph, then eighteen years old, came to the throne in 1848 and took up his residence at Vienna, he found his capital in a most uncomfortable plight. The town itself — where the royal establishments were located, where the nobility and all the principal people lived, and where all the business of Vienna was transacted — occupied a space of about one square mile. It was surrounded by massive old fortifications, and outside the walls lay a broad and deep moat, beyond which extended a belt of glacis ground, kept clear of buildings on military considerations.

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The suburban villages.

On the outskirts of this military zone were thirty or forty forlorn villages which were beginning to grow together and to form a continuous mass of mean houses—and they were the worst-appointed suburban neighborhoods to be found almost anywhere in Europe. Francis Joseph's municipal constitution of 1850, to which I have already referred, united these suburbs with the inner city and consolidated them into seven permanent wards or bezirken, the old city forming a separate bezirk. Subsequently a rearrangement increased the number of bezirken to ten, and since the extension of boundaries accomplished in 1890, an outer ring of nine additional bezirken has been added. The new boundary line as fixed by Francis Joseph in the earlier period of annexation was an outer ring of military defenses that had been created in the eighteenth century.

Extension of city limits.

For several decades it had been felt that the inner fortifications were opposing a most vexatious and harmful barrier to traffic and intercourse. The gateways were infrequent and wholly inadequate. Population and commerce had been growing fast, and rentals for the limited accommodations inside the walls were becoming enormous. Every available foot of ground was built upon, new stories were added to old buildings, retail trade was compelled to find upper floors, and population was compacted in an intolerable manner. Under existing circumstances nobody would live in the suburbs who could live inside the old city; and only one remedy for the situation was possible. A long discussion ended in the memorable order signed by the emperor on December 20, 1857, for the destruction of the fortifications.

Congestion within the walls.

Order of 1857 to remove the barriers.

The whole community now rose to the height of the great occasion. Vienna was the most inconvenient, ill-regulated, and unimposing capital in all Europe.

CHAP. VIII. Vienna's brilliant opportunity.

It had now an opportunity to become perhaps the very handsomest and most convenient. Paris had been hampered by the fact that its new avenues must in great part be cut through solidly built areas, that its chief architectural monuments were already built or located, and that it could not apply its art of modern city-making upon a swept area. But Vienna possessed in the broad encircling belt of walls, moat, and glacis an area greater than that of the entire inner city. That which had obstructed communication between the heart of the metropolis and the outlying members was now to facilitate it. The walls were to be removed, the moat filled up, and the space thus gained, together with the broad glacis belt, was to be laid off in streets, building sites, and public gardens in such a manner as to make intercourse between the central and the outer districts as free as possible.

A systematic plan.

The whole arrangement was planned systematically; and in the two or three years that were required for demolition and the clearing and leveling of the zone, the most talented landscapists and architects of the day were engaged upon competitive plans for the final laying out of the ground. One might easily make a long story of this *stadt-erweiterung* project; but it must suffice here to present the summary results. The central feature of the plans that were adopted was a great encircling street, the so-called Ring-strasse. It is in fact a polygon rather than a circle that the Ring-strasse describes, its angles — which are not entirely regnlar — giving it an octagonal appearance. Upon this broad and elaborately constructed thoroughfare was made to front a series of gardens and open park spaces; and roomy sites were reserved for a number of great public buildings. The ground that remained was laid off in regnlar cross streets and parallel streets, and building sites were sold to private purchasers.

The Ring-strasse.

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After some preliminary difficulty touching matters of detail, there was generous coöperation between the imperial and the municipal governments in the great task of transforming Vienna; but the particular scheme known as the stadt-erweiterung was taken in hand and administered by a commission appointed by the emperor and accountable to the central government. The fortifications themselves were unquestionably the property of the general government, although there was room for a difference of view concerning the reversionary title to the glacis ground. In any case the city council argued that street plans and improvements were properly a municipal function, and that the business should be delegated to the city authorities. The emperor, however, was firm, and the council yielded gracefully.

The project managed by imperial authorities.

Everybody in Vienna has long ago admitted the wisdom of the emperor's policy. He saw clearly that the best service he could render the city authorities themselves would be to relieve them of responsibility for the special and extraordinary task of constructing the new zone, in order that they might be free to devote their energies to a hundred other important tasks which needed concurrent attention. The prestige of the imperial commission, moreover, made it easily possible to carry out a liberal policy which the town council could hardly have ventured to pursue. The land comprised in the cleared zone was so valuable that it might have seemed extravagant on the part of an elected citizens' body to devote so much of it to ornamental and unproductive public purposes. It is not conceivable that the gemeindesrath would have been able to agree upon so splendid a plan as that of the imperial commission. But a more niggardly plan would have been a less successful financial policy in the end. It was simply the emperor's object to make

A wise policy.

Town council could not have adopted so liberal a plan.

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Fund from sale of building sites.

Harmonious results.

The great architectural monuments on the Ring-strasse.

the improvement scheme self-sustaining, on as magnificent a scale as possible. About four fifths of the entire area was retained for public uses, and the remaining one fifth was sold as building sites to private purchasers for a sum that has been stated in round figures at 200,000,000 florins — about $80,000,000. Out of that fund the commission made new streets and sewers and proceeded to erect a series of public buildings which — with those built by the city and other public authorities on sites provided by the commission — now render the Vienna Ring-strasse the most imposing street in the world. Such a sum would not build many Albany capitols, New York court-houses, or Philadelphia city halls; but public buildings are less expensive in Austria. Eighty million dollars is a vast sum in Vienna; and when expended upon public edifices and their artistic adornment with the enlightened taste, constructive skill, and administrative honesty and thrift which characterize that city, noble results might well be expected. The architectural character of all private construction upon the *erweiterungs-grund* was strictly regulated in the interest of harmony, and nothing mars the symmetry of the whole, or detracts from the effect of sumptuousness and magnificence.

The new monumental structures facing upon the Ring-strasse include the Rathhaus (city hall), a surpassingly beautiful specimen of the modern Gothic, opened in 1885; the Austrian parliament buildings, in pure Grecian style, opened in 1883; the main building of the University of Vienna, a magnificent Renaissance structure, completed in 1884; the royal theater, unequaled in Europe, and opened in 1888; the Votive church, finished about 1870; the palace of justice, opened in 1882; the imperial museums of art and science, two magnificent Renaissance buildings, opened

since 1890, between which, with ample space for effect, is the colossal monument to Maria Theresa; the new imperial palace, not yet finished; the imperial opera-house, finished before 1870; various palaces, museums, art schools, garrison and arsenal buildings, and showy structures for commercial-exchange or other business purposes. The Ring-strasse has been criticized as grouping together too many magnificent structures in different styles of architecture, the individual buildings thus failing to produce the full impression they might convey if more entirely isolated. I am not disposed to think that the facts justify the criticism, in view of the generous garden spaces which give each great structure an ample approach. But it is not with questions of pure taste in architecture that this particular survey of the new Vienna is concerned. It is enough for me to remark that the beautiful Ring-strasse, nearly two hundred feet wide, is lined with the most imposing array of modern structures to be found anywhere in the world, although the street was not opened until 1865.



Opinions touching the general effect.

The magical transformation that the erweiterungs-fund has been enabled to bring about might well furnish the land-nationalization advocates with an illustration of the possibilities that lie dormant in the "unearned increment." The little fraction of the old fortification- and parade-grounds that the government sold to private buyers had apparently sufficed to cover the rest of the area with beautiful streets, incomparable public edifices, and charming gardens adorned with fountains and statues, in which are open-air concerts free to all the people, besides refreshment pavilions and much else to afford popular entertainment; and still there remain, it is said, some millions of florins in the unexhausted erweiterungs-fund! It is not true, however, that this fund has paid nearly all the bills

The potentialities of "unearned increment."

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The fund did not pay all the bills.

for Vienna's remaking. The municipal treasury has shared in much of the cost of streets and public works, and it paid for the city hall; while the imperial Austrian government and the provincial authorities of Lower Austria have also borne the cost of placing their own structures upon the sites that the erweiterung project freely assigned them. But the impulse proceeded, nevertheless, from the imperial policy and its shrewd and attractive methods for securing coöperation in all directions.

Impetus to private construction.

If the project had only succeeded in arousing the municipal, provincial, and national authorities to a large participation in the making of a new metropolis, but had not also awakened the enthusiasm and stimulated the activity of private builders, it would have fallen far short of its full purpose. What Vienna needed more than monumental edifices was proper house-room for its rapidly growing population, and accommodation for its merchants and traders. In fact the erweiterung improvements gave a tremendous impetus to private construction, not only on what was known as the erweiterungs-grund, but also in other parts of the city. Several magnificent new suburbs were built, in sharp contrast with the prevailing meanness of the suburban architecture of the previous period. All this building activity was greatly accelerated,

Remarkable policy of exemption from taxes.

if not chiefly prompted, by laws exempting new houses from taxation. Thirty years' exemption was granted those buildings erected in the first five years upon the erweiterungs-grund, and twenty-five years' was allowed in case of buildings completed in the next five years. These conditions naturally gave an enhanced value to the sites that the commission offered for sale, and helped to swell the accruing fund. But shorter exemptions were also extended to all parts of the city,— the period being from fifteen to eighteen years,

Extended to all parts of the city.

according to the promptness with which the work was taken in hand and accomplished. From time to time these encouragements were renewed for the benefit of subsequent builders, although the period of exemption was finally reduced to twelve years. In a city like Vienna, where the taxes upon a house are expected to amount to about half the rent, such exemptions constitute a most substantial bonus; and inasmuch as the inducement was applied also to any considerable enlargement and improvement of houses already existing, it may easily be believed that the result was an almost entire reconstruction of the city. The situation afforded an opportunity for the shifting of population from the interior to the outer bezirken, and the commercial structures of the interior were very generally rebuilt or improved. On the erweiterungs-grund the banking and monetary institutions promptly undertook or fostered large building operations, and a great number of joint-stock building companies began to vie with each other in the speculative erection of buildings in all parts of Vienna,—their shares being listed on the Bourse and bought and sold every day. The reaction came in 1873, when many companies and individual speculators failed. But meanwhile the city had been marvelously and permanently altered for the better.

The city reconstructed.

An era of building speculation.

Stringent building regulations.

The authorities had made the most exacting regulations as to the character of new buildings, and nowhere else, so far as I am aware, has recent construction been so solid and durable. Stone staircases to the very top floor, great strength of walls and floor-joists, double fire-walls, good provision for air and light, prohibition of garret and cellar residences, proper connection with the city's new water-supply and new sewers,—these and other requirements

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having to do with safety and health were joined with similarly strict rules regarding street-lines, balconies, height and generally harmonious appearance of façades, to make a building law of the most Draconian description. Now that the city has extended its limits very greatly, these building regulations have been somewhat modified in their application to the smaller class of houses built upon side streets in outlying neighborhoods; but they remain stringent.

A high authority in Vienna has told me that in his opinion the building laws are too severe because tending to make rents excessively high for poor families. But I doubt the correctness of his view, whether as a general statement or as a particular Viennese observation. If in these chapters on European cities I have devoted much space to official demolitions and the interferences that are involved in a wholesale reconstruction by public authorities of the dwellings of the people, it is not because these undertakings seem to me desirable in themselves. It is to obviate the necessity for them that the best possible building regulations ought everywhere to be put in force.

Value of preventive measures.

The relief of the inner bezirk from its choked and congested state, which followed the removal of the barriers, the construction of great business blocks upon the Ring-strasse and the other new streets, and the outflow of trade and population over a widened area, made it feasible to reform the tangled street system of the "old Vienna." Many of the interior thoroughfares were broadened and straightened, new paving was laid after the new sewers had been duly constructed, and the renovated *Innere Stadt* entered upon a new era of business prosperity.

Relief of the inner city.

The outer street system also was revised and improved. The thirty-four *gemeinden* or village communities which had been annexed, consolidated, and

arranged as the nine environing wards or bezirken, and which contained four fifths of the population, had sprung up originally on the lines of country roads approaching the old town; and these several *haupt-strassen* or main roads were now developed into great radial thoroughfares, pouring their streams of traffic into the broad Ring-strasse, upon which the influx could easily be distributed. These roads had formerly been almost impassable for the mud in winter and the dust in summer; but they were now well paved, well sewered, well lighted, and in all respects arranged as convenient highways of communication between the center and the suburbs. Perhaps no other city of equal size is so conveniently appointed as regards the daily movement of population to and from the center as the new Vienna. Nearly all important institutions,—parliament, law-courts, university and other educational establishments, central post-office, bourse, municipal and administrative buildings, imperial establishments, officers' barracks, chief theaters, cafés, and places of resort and amusement,—with banks and leading business establishments, are either in or near the Ring-strasse; while the inner district is full of business establishments of every character. The network of streets in the old town connects at perhaps forty points with the Ring, while the series of about fifteen main radials extending outward (of course these are not geometrically regular), draw from the Ring and empty into it as from a great receiving and distributing reservoir. Blockades and obstruction are practically impossible with this street system.

The outlying radial thoroughfares.

Advantages of Vienna's main street system.

The street railways do not invade the inner city, but all their operations center upon the Ring. The incomer on any given spoke is carried along the

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Arrangement of street-railway lines.

perimeter of the hub until he reaches the point nearest his destination, and in like manner when returning he enters his car at any point on the Ring and is carried around to the desired radial and thence outward. There has more recently been built a great outer concentric street, the so-called *Gürtelstrasse* (girdle street), following the line of the boundary defenses; and upon this street there is also operated a street-railway line that crosses the radials and forms a harmonious part of the general system. With the growth of the city, leading up to the annexation in 1890 of another wide zone lying beyond the Gürtelstrasse, the transit system has been further extended to accommodate the half million people in the newer suburbs.

Projected rapid-transit system.

There has now been projected by the municipal authorities a rapid-transit system to consist in part of steam railways and in part of electric lines, which will connect the stations of the existing railway lines and give the metropolis a service of fast trains extending to all its parts. The electric lines will cross the inner city at right angles, and there will be an inner circuit, with nine or ten stations (running parallel with the Ring-strasse, but at a little distance outside of it), with about half a dozen lines radiating from it, not to mention an outer circuit known as the gürtel line. The project includes still other circuit and single lines, and the system is to be constructed gradually during a period of years,—although a considerable part of it has been marked for completion before the beginning of 1898.

The Vienna Tramway Company, which operates almost the entire ordinary street-railway system, has a franchise that was in 1887 extended to the end of the year 1925, in consideration of large money payments to the municipal treasury and various agreements favor-

able to the community. The company runs workingmen's cars morning and evening with reduced fares, makes special concessions to school children, provides transfer or "correspondence" tickets, and arranges all its numerous radial lines on a zone system with a charge of 5 kreutzers (equal to an English penny or two American cents) for each zone. A 10-kreutzer fare (equal to 4 cents) pays for a ride regardless of the number of zones, and entitles to a transfer ticket for any part of Vienna. Four kreutzers (equal to 1⅔ American cents) is the price of a workingman's ride, regardless of distance, in the special laborers' cars. The public authorities have a voice in the fixing of fares and exercise a general oversight. The system as a whole is a remarkably complete and symmetrical one, and its able management suggests that of Berlin. When the municipal rapid-transit system is superadded, Vienna will be exceptionally well supplied with means of communication.

Street-railway fares and methods.

Workingmen's cheap tickets.

The various public works that belong to the period of Vienna's reconstruction cannot even be catalogued in this rapid sketch; but some of the most important should be recounted. This was the era of railway building; and the Austrian state system established its terminals, bridged the Danube, and contributed to the city's development. One of the largest of the municipal undertakings was the improvement of Danube navigation. The natural course of the great stream as it flows across Lower Austria is through extensive marshes, which allow it no well-defined banks; and there are in some places a dozen channels winding among low islands which are at times completely submerged. Such was the character of the Danube in the vicinity of Vienna, where its course lay several miles east of the old city, describing an outward curve. A vast sum of money was success-

Railway terminals.

Danube improvement.

CHAP. VIII. fully expended in cutting a straight new channel which brings the river much nearer the city, gives it proper depth and definite banks, makes good landing-places feasible, and permits the railway system to operate a shore-line and to make convenient freight transfers with the two hundred steamers and the eight hundred great barges operated by the Danube Steam Navigation Company. The municipality and the general government have done everything in their power to promote the railway and shipping interests which have their terminals along the new Danube channel; and the town itself maintains, among other ventures, a great storage warehouse in which it rents space to merchants or other shippers. The Danube canal which passes through the heart of the city, and the *Wein-fluss*, a swift stream from the neighboring hills, both required the expenditure of large sums for embankments, regulation of flow, and numerous permanent bridges. Several great Danube bridges were also built as a part of the city's program of expansion.

Encouragement of commerce.

Bridge building.

Sanitary reforms, meanwhile, went hand in hand with schemes for the adornment and the commercial development of the city. The greatest of the public-health projects was that of a new water-supply. Vienna was ill supplied with good drinking-water, and forms of disease that are propagated by contaminated water were prevalent. Typhus, cholera, and other infectious diseases found Vienna peculiarly congenial. A magnificent supply of water was introduced, at the cost of many millions of florins, from great springs in the Alps, eighty miles distant. The quality of this water is perhaps superior to that which any other large city in the world furnishes to its people. In the decade 1848–57 the average yearly death-rate of Vienna was only a fraction less than 42

The Alpine water-supply.

per 1000. The Alpine water was first introduced in 1873. For the decade from 1878 to 1888 the average yearly death-rate was 28.57. This improved showing was due in no small part to the pure mountain water, which has not lent itself to the spread of cholera, typhoid, or other disease germs.

Improvement in general health.

The Alpine water system, however, did not stand alone as a sanitary reform. The sewer system was thoroughly rearranged, and main drainage-tunnels were constructed by means of which the entire sewage of the city was conveyed to a point below the city and there discharged into the Danube. Vienna's hygienic and administrative experts have satisfied themselves that where a city's sewage can be swept away by a large stream like the Danube, no profitable use can be made of it for fertilizing the soil. A Berlin or a Birmingham must of necessity provide sewage-farms. But when a great stream with sufficient current, or the adjacent sea, can be made the receptacle, it seems to have been everywhere found more economical to throw away the manurial elements of sewage than to use them. Perhaps this conclusion may be changed by future experience or new discoveries.

Sewers and sewage disposal.

Approved methods of sanitary administration were introduced, and great hospitals for infectious diseases were built. The whole question of food-supply was brought under very active municipal supervision. The authorities created great public slaughter-houses and cattle-yards, and were soon able not only to make it certain that the supply of animal food was in wholesome condition, but also to make the price of meat much cheaper than it had been. A system of municipal wholesale and retail markets was also provided, with excellent appointments and with the purpose of improving the quality and cheapening the price of all the staple articles of food required in

Various sanitary reforms.

CHAP. VIII. Vienna. This series of measures has undoubtedly aided in the remarkable improvement that has taken place in the general health. The municipal cemetery arrangements were modernized and developed. Street cleansing and general scavenging were accorded a place of dignity and importance in the municipal housekeeping. A great establishment was created for the healthful and economical disposition of dead animals; and it produces fertilizers and various minor products, such as glue and plasterers' supplies, the whole undertaking being an example of the municipal economies that are likely everywhere to assume a considerable importance in years to come. Whereas the Vienna death-rate before 1860 was above 40 per 1000, it is now not more than 24. In 1892 it was 24.3, in 1893 it had fallen to exactly 24, and in 1894 to 22.8. This, as compared with conditions prevailing some thirty years earlier, means a saving of more than twenty thousand lives each year, an avoidance (according to the most careful calculations) of probably more than six hundred thousand cases of illness, and an incalculably valuable conservation of the productive and economic as well as the civilizing forces of the community.

Good effect of health measures.

The new era has witnessed the creation in Vienna of a very remarkable educational system, with the erection of nearly a hundred large structures in the bezirken for purposes of elementary instruction, and the establishment of a great number of institutions for secondary and special education. There is a general school-board for administrative purposes, partly appointed by the municipal authorities and partly delegated from the nineteen bezirken school-boards. In each bezirk the voters elect a group of school directors who serve, with several appointed members, upon the neighborhood school-board. The financial

Organization of school system.

control of the system is vested in the city council, and the burgomaster is at the head of the school administration. But the neighborhood elective boards enlist the aid and interest of a large number of citizens, and the schools are enthusiastically supported. CHAP. VIII. Neighborhood boards.

Public charity, also, while centrally organized through the regular municipal government, has its ordinary and practical work carried out in the several bezirken by means of local boards, the members of which are in large part directly elected by the voters of the district. It will not be necessary to describe in detail a system of poor relief and medical aid which is marked rather by good organization and satisfactory results than by any very novel principles or methods. The work of relief and charity.

I have already intimated that the architectural expansion of Vienna was attended and in large part caused by a rapid access of population. Between 1860 and 1890 the number of people within the boundaries had grown from 500,000 to 800,000, while outside the external line of fortifications a new series of suburbs had grown up which in 1890 were found to contain nearly half a million inhabitants. Many good reasons were adduced why these neighborhoods ought to be incorporated with Vienna. The boundary lines were accordingly extended to include them; and the new municipal area comprises nearly seventy square miles, the old limits (before 1890) having included only about twenty-one square miles. The population of Vienna in 1895 may be conservatively estimated at 1,500,000. Decentralizing tendencies in Austria, several periods of severe business depression from which recovery has been slow and painful, the growth of the Hungarian railway system and of Budapest at its center, with other causes that I will not attempt to enumerate, have seemed of late Growth of population. Depressing tendencies.

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somewhat to becloud the once brilliant prospects of Vienna. It is now clearly evident to my mind that if it had not been for the rebuilding of the city and its entire transformation under the impulse of the erweiterungs-project, Vienna would now be in a very critical commercial condition, if not in a hopelessly disastrous one. But these great reforms, coming at a time when a happy conjunction of circumstances favored their execution on a bold and courageous plan, have given Vienna an assured position that no political misfortune or new commercial rivalry can take away.

The saving fact in the situation.

My praise of the Vienna municipality, and of the efficient and intelligent conduct of its affairs, has been based upon the unalterable record of its character and its performances during a period of liberal government lasting through nearly a quarter of a century. The political reactions of 1894 and 1895 have made upheavals, the results of which it is too early to forecast. The wave of anti-semitism has for the moment overwhelmed the liberal majority in the municipal council of Vienna, and the antagonisms of race and religion seem to threaten the best interests of the school system, and in other ways promise to disturb the reasonable and harmonious working of the city's administrative departments. But I cannot believe that the anti-liberal and anti-semite victory of the autumnal municipal campaign of 1895, and the new policy thus sanctioned, represent the deliberate purpose of the people of Vienna.

Political reaction of 1894–95.

## CHAPTER IX

## BUDAPEST: THE RISE OF A NEW METROPOLIS

TO the world at large, Budapest, the capital and metropolis of Hungary, is the least known of all the important cities of Europe. No other falls so far short of the appreciation it merits. Several reasons may be assigned for this comparative obscurity; among which are remoteness from the chief thoroughfares of travel and commerce, the isolation of the Magyar language and literature, and the subordination of all things Hungarian to the Austrian name and fame. But the most important reason is the simplest of all: the Budapest of to-day is so new that the world has not had time to make its acquaintance. Its people justly claim for it the most rapid growth in recent years of all the European capitals, and are fond of likening its wonderful expansion to that of Chicago and other newly-created American cities.

Why Budapest has not been appreciated.

When Kossuth found refuge in America after Hungary's tragical struggle for independence, the sister towns of Buda and Pest, lying on opposite sides of the Danube, together had hardly more than a hundred thousand people. The consolidated municipality had by the census of 1891 a population of more than half a million. But remarkable as is the increase of population, it seems to me far less remarkable than the physical and architectural transformations that have accompanied the town's growth in numbers.

Growth since the middle of the century.

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A finely appointed city.

Budapest is not merely four or five times as populous as it was in the middle of the current century, but it has blossomed out of primitive and forlorn conditions into the full magnificence of a splendidly appointed modern metropolis. Rapidly developing cities usually have the misfortune to grow wrongly, through lack of foresight and wise regulations on the part of the governing authorities. Budapest has not wholly escaped; but it would be hard to find another large town whose development has been kept so well in hand by the authorities, and has been so symmetrical and scientific from the point of view of approved city-making. In many particulars of appointment, as well as in general plan and *tout ensemble*, American cities might learn not a little from Budapest.

The play of political forces.

Political reasons have quite as much to do as commercial causes with the making and unmaking of European cities. Thus Vienna, which may well contest with Paris the claim to preëminence for beauty and splendor, owes almost everything, as I have shown in the preceding chapter, to the political events that followed the revolutionary movements of 1848. Vienna became the seat of government of a newly organized empire, and acquired a most liberal municipal constitution. Its prestige grew enormously, and it absorbed wealth and population from all parts of the Austrian dominions. The imperial government and the municipal authorities vied with one another in projects for the embellishment of the capital, the chief of these projects being the Ring-strasse and its incomparable array of public buildings. Meanwhile Hungary was chafing under the disappointment and humiliation of defeat, and was making little, if any, progress. But the Austro-Prussian war of 1866 humiliated in turn the so-called oppressor of Hungary. The Hungarians were now in a position to demand all that Kossuth

Hungary's opportunity.

and his compatriots had struggled so desperately in 1848 to gain. To the counsel of the Hungarian patriot and sage Francis Deák, one of the great men of modern times, is due the fact that, instead of absolute separation from Austria, Hungary accepted the form of dual monarchy that has existed since 1868. Hungary became a constitutional monarchy of the most liberal sort, having its own parliament, its own cabinet, its own entire administration, with Budapest as capital. The Emperor of Austria became King of Hungary. The two parts of the confederation were absolutely coördinate. Their military and diplomatic services were of necessity united like those of a single empire; but the delegations from the two parliaments which meet annually to vote the joint budget, and to order the joint services, sit in alternate years at Vienna and Budapest. It is true that the Emperor's ordinary residence is in Vienna, and that Vienna is the seat of administration of the confederate empire; but the Emperor is careful to spend much of his time, with his family and his court, in Hungary. In short, politically, the two capitals are as nearly on a par as it is possible to make them.

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The dual monarchy.

This change in the political wind had a most surprising effect upon Budapest. Hungary was at last free and self-governing, and in possession of liberal institutions. The hopes of 1848 were now to find realization. The whole life of the nation was invigorated, and that life centered in the capital. Ambitious young politicians had no longer to seek a career in Vienna. Home rule gave them full scope in Budapest. Social life was also awakened. The Hungarian nobles, who, with every other element in the population of the empire, had been contributing to the architectural splendor and social brilliancy of Vienna, were now disposed to build their palaces in their own

New life for Budapest.

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A home-rule capital.

capital; for they had acquired seats in the upper house of the Hungarian parliament, while Vienna was henceforth to be regarded as their capital hardly more than Berlin or Paris. The transformation and embellishment of Vienna as the sole capital of Francis Joseph's dominions had just begun fairly to show results, when the new order of things cut those dominions in two parts, and made Budapest the rival capital, with slightly the larger of the two territorial divisions. It is true that Hungary had a smaller population, and industrially was far less advanced than the provinces of which Vienna remained the capital; but the curtailment was obviously detrimental to Vienna in many ways. Moreover, Vienna has felt the effects of decentralizing tendencies in the provinces remaining to her; for the Bohemians are developing their beautiful local capital Prague, the Austrian Poles are expending their energies upon their own Cracow, the Moravians are improving Brünn, the Italians are showing preference for Trieste, and other provincial centers are beginning to assert themselves. In Hungary, on the other hand, Budapest has no rivals; all roads lead to the capital. There is in Hungary a compactness and unity that form a marked contrast with the scattered and discordant provinces which have their political center in Vienna. Budapest is now the capital of a nation of seventeen millions of progressive and ambitious people, and this new political fact is of itself sufficient to account for much of its growth.

The decentralizing tendency in Austria.

Unity of Hungary.

The commercial conditions also are not to be overlooked. Hungary is an agricultural country, lying for the most part in the rich valley of the Danube and its principal tributaries. Central Hungary is a vast level plain, an uninterrupted stretch of cultivated fields. One rides across it late in June or early

in July to find it looking much like Illinois or Iowa, the chief crops being wheat, maize, oats, barley, and hay, growing luxuriantly and extending as far as the eye can reach, without fences to break the sweep of vision. In these favored recent times the agricultural production has much increased, and Budapest is the market for the farm surplusage. As a grain-receiving point it is to the Hungarian plain what Chicago is to Illinois and Iowa, or what Minneapolis is to Minnesota and Dakota. It is hard to realize how commercially undeveloped all this Hungarian country was only a few years ago, and what meager facilities it had for reaching the markets of Europe with its surplus food products. The new government at Budapest set itself to work to develop agriculture and trade, without any particular fear of being charged with socialistic activities. Somebody had to take the initiative. The country was poor and without capital. To secure a system of railroads it was necessary to grant heavy subsidies to English, French, and German capitalists, who formed companies and established lines. But the government found subsequently that it could better afford to take over the roads, and put them under a consolidated public administration, than to pay annual subsidies to a dozen private companies. The results have justified its policy. In every possible way the government has made the State railway system conduce to the development of Hungarian industries. Under the railway administration there has been established at Budapest a great government manufactory, not only of locomotives but of all sorts of heavy machinery, including agricultural machines, a special product being threshing-machines. It is only recently that machinery has been introduced in the farming operations of southeastern Europe, and the innovation

Budapest as a grain market.

The State railroad system.

The government as a maker of farm machinery.

CHAP. IX. makes headway somewhat slowly against the prejudices of the peasantry. Thus, in a recent summer, in the hay-fields of the Hungarian plain, I saw many a row of mowers, wearing the long white cotton tunics of the region, and swinging their scythes in unison, quite as described by Tolstoi in the famous mowing chapter of "Anna Karénina." Indeed, I did not happen to see a single mowing-machine at work. But I am assured that mowing- and reaping-machines are largely used in some parts of the country, and that their use is steadily increasing.

As all the railroads center in Budapest, every effort to develop Hungarian agriculture benefits the commercial capital. The grain shipments, however, are chiefly by water,—on the Danube and its tributaries,—a great fleet of roofed grain-barges plying on these waterways between Budapest and the wheat-fields. Some of these barges, which are of a construction peculiar to the Danube, have a capacity of six hundred tons of grain. The government has exerted itself to improve navigation, and great river improvements have been made at Budapest, to which I shall again refer. While the growth of Budapest has been influenced by causes already described, it has also been aided by the development of the flour-milling industry. Within twenty-five years the processes of flour-making throughout the world have been revolutionized by reason of certain Budapest inventions, of which the most important is the so-called "middlings-purifier" and gradual-reduction system, and the next in importance the substitution of steel rollers of various sizes and patterns for the old-time millstones. These inventions have resulted in giving the industry of flour-making to large mills, thus annihilating small mills by tens of thousands. The new ideas were quickly borrowed by Minnesota millers,

Danube commerce.

Milling as Budapest's special industry.

and by them were largely developed and improved; and Minneapolis and Budapest have grown contemporaneously as the two great milling centers of the world. Minneapolis leads in the collective capacity of its mills and in the annual product; but it has a larger field in which to operate, and possesses facilities which Budapest lacks. The mills of the Hungarian capital are, however, a series of magnificent establishments, fitted up with automatic machinery invented and manufactured in the city, provided with electric lights, and well supplied with ingenious contrivances to prevent fire. Their finest grades of flour are sent to all parts of the world except the United States, and command the highest prices. One of the municipal institutions of Budapest is a huge brick grain-elevator,—the only one in all Hungary at the time it was built,—occupying a conspicuous place near the Danube bank and convenient also to railway tracks. It was built by the city some years ago as an object-lesson in the modern American methods of handling grain.

A municipal grain-elevator.

Although it is to see new things rather than old that one visits Budapest, it may be well to say that the town once possessed a Roman fortress and colony, and that its commanding site has involved it in military operations from time immemorial. It is only two hundred years since the Turks were driven out of Hungary, after an occupation of a century and a half. The fortress and rugged promontory are upon the right, or south, bank of the Danube, and pertain to Buda. Pest lies upon the flat north bank, and beyond it stretches the illimitable plain. In the old times Buda was the large town, while Pest was only an insignificant village; but all the modern conditions of growth have favored the Pest side, which is now four times as populous as the other. The Buda or

The old-time fortress.

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The citadel and the new Pantheon.

Buda and its hillsides.

The period of progress.

Ofen (Ofen is the German name for Buda) bank is, however, picturesque in the highest degree. The Blocksberg promontory rises abruptly, a sheer mass of rugged rock, nearly a thousand feet above the grand stream that washes its base; and it is crowned with a now useless citadel. For a long time, the Hungarians had promised themselves that some day a classic pantheon in honor of Hungary's long list of great men should be erected on this commanding acropolis. And now one of the chief events of the millennial programme of 1896 is to be the dedication of this Pantheon, in which will be placed the statues of personages whose name and fame give luster to a thousand years of Hungarian history. Adjoining the Blocksberg, but not so high, and rising less steeply from the river's brink, is the fortress hill, upon which stands a vast royal palace. Its cheerful buff-colored paint and long rows of green window-blinds suggest a summer resort hotel; but it is really a very imposing structure, and its situation could hardly be more commanding. About it, on hillsides and in valleys, lies the town once called Buda. On the retreating slopes of the Blocksberg, and upon the sides of the higher mountains that lie in the rear, are many pleasant villas. Buda and its neighboring hills have long been famous for their vineyards and their wines. From the Blocksberg or any other of the neighboring heights, the view up and down the Danube, and over the stately city of Pest on the opposite bank, is enchanting.

It would, of course, be erroneous to say that all the progress, all the improvements, and all the good buildings of Budapest date from the new Hungarian constitution of 1868, or from the municipal consolidation of Buda and Pest which followed that political event, and which was consummated in 1873. Between

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1848 and 1868 not a little progress had been made. The Archduke Joseph had done much for the sister towns. Population had increased materially; the magnificent suspension-bridge had been built; the patriotic Count Stephan Széchényi had founded the National Academy to foster the Magyar speech and literature, and had built for it a fitting renaissance palace at this time, when the Germans were "in the saddle," and when even the University of Budapest was a German institution with German professors in its chairs. Although, with Russian aid, the Austrians had crushed the Hungarian movement of 1848, so that the people's leaders had to choose between exile and the halter, while for some years the whole Hungarian nation was made to feel the heavy weight of the Austrian yoke, it is nevertheless true that the awakening of that year of revolutions resulted in a progress which left many marks in two decades. But after this is said the fact remains that nearly all the systematic, appreciable advances of Hungary have been made in the years that have followed the happier events of 1868. In Budapest, deliberate projects were adopted for the beautifying and development of the city as a fit capital for an ambitious young state. The exiles of 1848 came back with wisdom and experience to take the helm. Count Andrássy, who had been sentenced to be hung, now became prime minister. The reaction was most energetic. For the time being, all things German were at a heavy discount. The German officials were hustled out to a man. The University was reorganized on a Hungarian basis, and the whole corps of German professors was unceremoniously dismissed.

Budapest from 1848 to 1868.

National self-assertion in 1868.

Such being the national mood, it is easy to understand that the moment was propitious for large plans. Vienna was carrying out its stadt-erweiterung projects

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City improvement plans.

in the most magnificent way; and while Budapest could hardly hope to become a Vienna, there was a unanimous determination to modernize and improve the place to the highest possible degree. The ministry and the municipal authorities coöperated, and building operations were intrusted to a mixed commission of the national and city governments. As was proper alike from esthetic, sanitary, and commercial considerations, the river was made the center of improvements, and was constituted the prime thoroughfare, the chief open space and place of resort, and, in short, the unrivaled attraction of the city. It became to Budapest what the Grand Canal is to Venice — something more essential than the Seine to Paris or the Thames to London. Magnificent stone quays and retaining-walls were built, extending for nearly three miles on the Pest side and also for a long distance on the opposite shore. These were thrown well out, the broad channel being thus compressed somewhat to secure a clean, sweeping current. Up and down along the broad promenades facing the water have been erected palatial buildings. The quays are high, and stairs, built continuously for a long distance, lead down to the lower level of the landings, upon which the heavy traffic is confined. The rows of buildings are broken at intervals by open park spaces, in which are effectively placed the statues of various Hungarian notabilities. A number of handsome public buildings are included in the row upon the quays of the left bank, and toward the upper end of the row has been built the magnificent new Parliament house, in which the first session will occur in 1896. Further down are the National Academy, the city's so-called "Redoute building," the old Rathhaus (city hall), the vast new Custom-house, and various other establishments. For the distance

Essential nature of the Danube.

The quays and promenades.

Public buildings on river-front.

of perhaps a quarter of a mile below the suspension-bridge the quay is a shady promenade, a chair-lined *corso*, upon which all driving is prohibited, and where on summer evenings many hundreds of fashionable people congregate, patronizing the cafés and restaurants, the tables of which are set under the trees in the open air. The Hungarians are even more fond of out-of-door eating and drinking than the Viennese; and Budapest is a city of magnificent cafés.

Street reforms.

But, to proceed with a description of the improvement plan, the inner and ancient Pest, known as "the city," and lying upon the river-bank, has been surrounded by boulevards in the form of a polygonal "ring-strasse"; while by demolitions and reconstructions the interior tangle of narrow streets has been brought into something like a modern system. From the sides and angles of the inner ring-strasse broad radial boulevards have been thrown out in straight, or measurably straight, lines to the outer edges of the metropolis, and the lands lying between these great spokes are divided by street systems almost as regular and rectangular as those of American cities.

The two ring-streets.

Handsome as is the broad inner ring of boulevards, lined with fine buildings, it is far surpassed by the newer "grosse-ring," which crosses the radials about a mile further out, and which describes an arc that, from the new Margaret Bridge to the point where it again meets the river, is four or five miles long. It is very broad and finely paved, and is already lined for the greater part of its course with massive, pretentious structures, while building operations are now busily closing the gaps all along the line. Still other ring boulevards in a concentric series are to be constructed in the future.

The finest single street in Budapest, the gem of the improvement works and the pride of the citizens, is

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The Andrássy street.

the Andrássy-strasse, a broad boulevard connecting the inner city with the "Stadtwäldchen." The Andrássy-strasse is perfectly straight, and two miles long. It was planned with consummate art, and is one of the most beautiful and effective streets in Europe. Some enthusiastic people pronounce it without exception the handsomest of European streets, and certainly it tempts one to use superlative language. It is divided into three parts by the "Octagon-platz," where it crosses the larger ring-strasse, and by the "Rund-platz," or "circus," at a point where another encircling boulevard is eventually to cross. As it emerges from the Octagon-platz and the Rund-platz the street grows successively wider, although this would hardly be noticed by the casual passer. The first third of the distance is devoted to fine buildings, of varied architecture but general conformity, built solidly on the street line. The next third contains houses having narrow fore-gardens of a prescribed width. The last third — extending for two thirds of a mile — is devoted to separate villa-like residences, all at similar distance from the sidewalks, and, with infinite variety of architectural detail, conforming to the regular street plan. The vista from the entrance of this street to its end in the shady Stadtwäldchen is very beautiful. The broad central driveway is paved with wooden blocks on a solid concrete foundation. The sidewalks are of asphalt, the narrower driveways next the sidewalks are paved with square-cut stone blocks, and the equestrian courses, which are between the central and the outer driveways, are graveled. Although there are no individual buildings on the Andrássy-strasse which cannot readily be matched in any other important city, the average of architectural merit is very high; and the absence of anything that can mar the general

Character of paving.

effect is an important element in the success of this public improvement. It should be said that the Buda side has also its boulevard system, and that the cost of expropriations and of construction in this remodeling of the street-system has aggregated a large sum. CHAP. IX.

The Stadtwäldchen is a beautiful park of about a thousand acres which plays a most intimate part in the life of the Budapest people. Fortunately it is not remote or difficult of access, and is to Budapest what the "Prater" is to Vienna. It contains a charming lake for skating in winter and for pleasure-boats in summer. It has its areas of deep and quiet shade, its zoölogical corner, and, above all, its collection of cafés, refreshment-stands, shooting-galleries, "roller-coasters," arenas, Punch and Judy shows, summer theaters, wax-work exhibitions, and "side-shows" in bewildering variety, all very cheap, all very good of their respective sorts, and all very delightful to the pleasure-loving thousands who resort to the park in the spring and summer afternoons. Here is located also one of the municipal government's hot sulphur-water bathing establishments. Of small parks and open spaces the city has a number, though not so many as should have been reserved. The Elisabeth Park is especially worthy of mention. The principal park.

Certainly it would be unpardonable to omit mention of the "Margareta Island." The "Margareten-Insel" lies in the Danube, at the upper end of the city. In ancient days it belonged to an order of nuns, the ruins of whose convent still remain. In the fifteenth century the Turks drove the poor nuns away, and the janizary pashas established their harems there. On the expulsion of the Turks the island became city property, but a generation ago it was given by the municipality to the Archduke Joseph for a hunting-ground. The present archduke keeps it in beautiful order as a The Margareta Island.

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pleasure-ground for the public. It is nearly two miles long and about half a mile wide, and it deserves the enthusiasm with which the Budapest people regard it. It is full of a variety of magnificent trees, has tasteful flower-gardens, is also the seat of mineral baths elaborately appointed, with two or three adjoining hotels, and has the restaurants without which no pleasure-ground would be complete in southern Europe. Among the hills of the Buda side, also, are parks and pleasure-grounds; and the population is blessed with much beautiful weather and a great number of holidays in which to enjoy its open-air advantages.

Parks on the Buda hillsides.

Budapest has a municipal council that is as large as a "town-meeting." If any other city in the world has a council of 400 members, I have not yet learned the fact. Pest began in 1868 with 200 members; but when the consolidation was effected in 1873 the plan of adding 200 members chosen from the higher ranks was adopted. It was provided that the whole body of electors, besides choosing 200 common members in the nine wards, should choose 200 more from a list of the 1200 largest taxpayers. In the making of this list men of liberal education are rated for double the taxes they actually pay, in order that brains and learning may have recognition. A standing committee makes out a list of the aristocratic 200, and it so happens that the great voting public always elects the entire list thus selected. The whole council retires *en masse* at the end of each six years' term. The body is of course much too large for efficiency. Possibly a hundred will be found at one ordinary meeting, and at the next meeting a hundred again, but quite a different hundred. The committees also are much too large to be workable, some of them having thirty or forty members. The actual execu-

Budapest's council of 400.

The taxpayers' element.

Too large a body.

The executive magistracy.

tive work is performed by a magistracy composed of a burgomaster, two vice-burgomasters, and ten other so-called magistrates, all chosen by the council for terms of six years. Each magistrate has his special administrative department. These and several other high executive officials are ex-officio members of the council. Two officials, the Director of Archives and the Director of the Municipal Bureau of Statistics, are appointed for life. The advisability of reducing the membership of the council is generally recognized, and when the opportune moment for a revision of the municipal constitution comes, it is quite possible that the aristocratic 200 will be cut off at the first stroke. But the inefficiency of the present unwieldy council is counterbalanced by the efficiency of the smaller magisterial and executive corps, so that Budapest cannot by any means be called a badly governed city.

Efficiency of administrative corps.

The Hungarian system in general.

Apart from Budapest, the municipalities of Hungary are organized under the terms of a general statute which makes a difference between the smaller places—the communes (*gemeinden*)—and the municipal corporations. The smaller places are self-governed upon principles similar to those that obtain in the organization of the municipalities, but their system is less elaborate. The basis of things in all cases is a municipal council, which in the little rural hamlets and villages varies in size from 10 to 20 members, in the larger communes from 20 to 40, and in the fully developed municipalities from 48 to 200. Hungary has no large cities except Budapest, but it has about twenty large towns which by the census of 1890 had an average population approaching fifty thousand. The voters are those who have paid a small tax. The general rule prevails throughout Hungary that one half of the communal or municipal council shall be elected by the whole body of voters, and that the

Size of councils.

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Largest tax-payers occupy half of the council seats.

other half shall be made up of the largest local tax-payers who are eligible by virtue of citizenship, residence, age, etc. It is this arrangement, doubtless, that has influenced the Hungarian parliament in ordaining that the councils shall be so large. Thus in a town whose council consists of 200 members, the first hundred is made up of men who have a right to their seats by virtue of the fact that they head the tax-list. They hold their seats for no definite period, because the tax-lists are revised every year, and circumstances make changes in the personnel of the hundred who are nearest the top. While these tax-payers have a right to sit in the council, it does not follow that they will care regularly to exercise the right. The more stable element of the body consists, therefore, of the half regularly elected by the voters. As in Budapest, so in all the towns and communes of Hungary it is true that professional men and all men who follow callings that imply considerable education are listed at double the amount of taxes they actually pay, in order that their classes may be reasonably sure of a good share in the make-up of the governing bodies. It is only in Budapest that the aristocratic half of the council is chosen by election from a larger list. Elsewhere it suffices that a man is a member of the group of largest tax-payers. Under certain specified circumstances a large tax-payer who is non-resident or otherwise unable to serve may name his own substitute. Sometimes a large tax-payer prefers to hold his council seat as one of the elected members of the body; in which case the next largest tax-payer comes forward as a councilor. It is an interesting fact, moreover, that any firm, company, or other organization that pays taxes on property may, as a legal personage, exercise the local franchise through some one holding its power of attorney or authorization. In

Recognition of educated men.

Some peculiar provisions.

Budapest, where the whole electorate (composed of all tax-paying citizens who can read and write) has a right to vote for 200 out of the list of 1200 largest tax-payers, the room for selection is so wide that the results are very different from those that are found in other towns, where absolutely the largest tax-payers always fill half the places in the council without election. The standing executive committees and the chief officials carry on the practical work of administration in a manner that is much alike throughout the entire Austro-Hungarian empire. The chief heads of departments, who form with the burgomaster a magisterial council, and who, like the German magistrates, are practically life members of the municipal service, have seats in the general town councils, with the right to speak and vote.

Wider range of selection in Budapest.

Executive system.

The social aspects of municipal administration have a growing interest and importance, and Budapest's experience and undertakings are worth relating. Before 1870 the average annual death-rate was 45 per 1000 inhabitants, and in epidemic years it reached 50. The rate is now about 25; and this remarkable reduction has been effected in the face of the rapid growth of the city's population. It means the saving of at least ten thousand lives a year. The rate is no longer a very high one even when compared with western Europe or America; and it is to be remembered that Budapest is the capital of a country that borders on the Turkish empire. The death-rate in most Eastern countries is vastly higher than in Western countries. Thus in Russia, and in the Danubian and Balkan states, the rate is higher than in Hungary. That Budapest, the crowded city, has managed to bring its death-rate to a point below that of the country as a whole is a most exceptional and noteworthy fact. From 45 per 1000 a very few years

Successful health administration.

Budapest's death-rate is lower than Hungary's.

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earlier, the Budapest rate had fallen to 41 in 1876, 40 in 1877, 31.2 in 1884, 29.4 in 1885, 27.9 in 1892, 26.8 in 1893, and 24.4 in 1895. How has this gratifying improvement of the general health been effected? By a series of municipal measures not yet fully completed. The first of these measures was an improved water-supply. The Danube water was pumped into reservoirs and filtered by the natural process through sand, with good results. The town grew so fast that the water question again became a pressing one, some quarters being obliged to accept an unfiltered supply, and it was determined to provide a new and permanent system, various plans being proposed, and artesian wells being tried with good results.

The question of water.

As the sequel has proved, one of the most fortunate features of the municipal reorganization that followed Hungary's assumption of home rule was the establishment of a bureau of statistics. Mr. Joseph Körösi was made statistician for life; and he completed twenty-five years of service in 1894. His reports, monographs, brochures, and special investigations, pertaining to almost every conceivable municipal question capable of statistical treatment, are without a parallel in the world for their complete, exhaustive, and timely character; and the social and sanitary reforms of Budapest have followed the lines laid down by the statistical bureau. Until Mr. Körösi's work began, the high mortality of Budapest was not known. Its citizens thought it an extremely healthy place. The statistical office was denounced as slandering and injuring the city when it first discovered and published the facts. But Mr. Körösi persevered, and his remarkable census of 1871 attempted to account for the high mortality. He made a thorough study of the conditions of the population, and found overcrowding very prevalent, and, worst of all, a very large element

The bureau of statistics.

Mr. Körösi's work.

The findings of the census of 1871.

of the population in damp underground residences. There followed a series of regulations to prevent these evils. Living in cellars was forbidden, and new quarters for the poor were constructed. But the badly housed population was too large to be shifted at once, and it became necessary to permit the reoccupancy of the drier and less objectionable subground domiciles. In 1881 the cellar abodes had been reduced to 7.6 per cent. of the whole number, while in 1891 the proportion had fallen to 5 per cent. In Vienna, meanwhile, the cellar dwellings in 1891 were only 1.2 per cent. of the whole number, by virtue of the reconstruction of the people's dwellings that I have already described.

Reduced percentage of cellar dwellings.

Compared with Vienna.

The very striking fact about the homes of the common people in Budapest is the prevalence of one-story houses, which are subdivided as tenements in such a way as to give each family only one main room, with a very small kitchen annex. Housing reforms in Vienna have resulted in the general creation of the large tenement-house of several stories, as in Berlin and Paris. And in Budapest the new tendency is in that direction. But the old custom of one-story houses that has always prevailed in south-eastern Europe is still chiefly characteristic of house architecture on the side streets and in the unfashionable bezirken of Budapest. Before 1870, four fifths of all the buildings of all descriptions were of one story, and barely 2 per cent. had two flights of stairs. In 1891, two thirds were still one-story buildings; but the three- and four-story structures had begun to multiply. In 1881, 62 per cent. of all the families were living on ground floors, and this proportion in 1891 had fallen to 59.5. In Vienna, 26 per cent. of the households were on the ground floor (*erdgeschoss*), while in the large German cities the average is from 13 to 20 per cent. Up one flight in Budapest are 21 per cent. of

One-story tenement houses.

High tenements in Vienna.

Gradual change in Budapest.

Households on different floor-levels in Budapest, Vienna, and Berlin.

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the families, while 9.4 are on the third floor, and only 5 per cent climb more than the two staircases. In Vienna, by way of contrast, 26.5 per cent. are up one flight, 21.2 are up two, and 24 ascend three or more. In Berlin, on the other hand, 35 per cent. of the households are three or more flights above the street floor.

Not counting the small kitchen annexes, or an occasional windowless closet, Mr. Körösi found in 1891 that the one-room dwellings were nearly 62 per cent. of the whole number, and that two-room dwellings were nearly 21 per cent., while those with three to five rooms were 15.3 per cent., and those with more than five rooms were only 2.2 per cent., or about one in fifty. In Breslau and one or two other large German towns the house-room is shockingly scant for the population; but in Budapest it is more restricted, unquestionably, than in any other large town of the civilized world. How very different the housing conditions of Vienna have become under the impetus of the tax-exemptions and the working of the new building rules, may readily be shown. The comparative figures present a striking contrast between the two capitals. It will be interesting, perhaps, to include in a table an analysis of the housing conditions of the other large towns of the Austrian empire, chief of which is Bohemian Prague, after which come Italian Trieste, German Gratz, Polish-Hebrew Lemberg and Cracow, near the borders of the Russian empire, and the thrifty, winsome Moravian capital, Brünn.

Great preponderance of one-room dwellings.

Vienna's striking contrast.

Housing conditions of chief Austrian towns.

For every 100 dwellings (space occupied by a distinct household) the census inquiry of 1891 found:

| *Dwellings with* | *In Budapest.* | *Vienna.* | *Prague.* | *Trieste.* | *Gratz.* | *Lemberg.* | *Cracow.* | *Brünn.* |
|---|---|---|---|---|---|---|---|---|
| 1 room | 61.7 | 5.3 | 16.4 | 11.7 | 17.6 | 36.5 | 31.4 | 4.6 |
| 2 rooms | 20.8 | 28.1 | 35.3 | 32.7 | 30.5 | 24.3 | 26.1 | 41.9 |
| 3 rooms | 8.7 | 53.0 | 35.8 | 38.0 | 38.6 | 31.0 | 30.0 | 42.1 |
| 4–5 rooms | 6.6 | | | | | | | |
| 6 and more rooms | 2.2 | 13.5 | 12.5 | 17.6 | 13.8 | 8.2 | 12.5 | 11.4 |

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When account is made of the extraordinary prevalence in Budapest of the one-room dwelling, the success of the health administration in its reduction of the death-rate by nearly one half becomes the more creditable. It must be borne in mind, however, that Budapest's one-room families are chiefly in one-story houses, where sunlight and air penetrate more freely than they could in many-storied slums; and that Budapest spreads its population over a comparatively wide area. The municipal territory has long been greater than that of any other European capital,—comprising nearly eighty square miles, and thus being larger even than Vienna's newly extended bounds. It is not to be inferred that the population is evenly distributed over this large territory, for much of the outlying region is made up of gardens, vineyards, farms and forests. But the tendency is towards a comfortable outflow over ample building space. And it is evident that the gradual replacement of one-story tenement-houses by those of three or more stories will greatly relieve the population-pressure upon a given area. The city itself, in view of Mr. Körösi's latest disclosures, has resolved upon a remodeling of some of the poorest quarters, and the work is to be inaugurated in 1896 as a part of the noteworthy programme of improvements with which it has been determined at Budapest to celebrate Hungary's millennial. These new reforms will not be as costly at Budapest as corresponding ones have been in various other European cities, for the twofold reason that the demolitions will chiefly affect one-story houses, and that real-estate in Budapest commands only moderate prices. The next general census, that of 1901, will certainly show a conspicuous improvement in the housing conditions of the Hungarian capital, even though it may be fifty years before Vienna's favorable position as to average amount of house-room can be attained.

Mitigating circumstances.

Large municipal area.

A new programme of housing reform.

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The town as a real-estate owner.

An American would certainly expect to find real-estate speculation rife in a city growing so rapidly as Budapest; but there seems to be practically none. This state of affairs is due, at least in large part, to the fact that much of the vacant land in and about the town belongs to the municipality, having been public property for a long time. As the growth of the town requires, the authorities from time to time sell building sites to the highest bidders. The modern school of land-reformers would condemn this alienation, and would insist that the fractions of the social domain should be leased rather than sold; but the south-eastern European is a firm believer in private land-holding, and loves to possess his own house and bit of garden. The municipal corporation of Budapest is fortunate in possessing all the ground that it needs for hospitals and public objects. This remark, however, does not apply to the Buda side of the river, the old town of Buda having at an early day parted with all its landed possessions. Most Hungarian towns, it may be observed, as well as those of Servia, Bulgaria and the Danubian provinces in general, continue to hold as municipal property an environing area of common land formerly used for village pasturage and fuel-supply, and now to be reckoned upon as a growingly valuable municipal asset.

Lots sold to private builders.

Common lands in southeastern Europe.

The food-supply of Budapest has been brought under suitable public control. The great municipal slaughter-house is one of the establishments in which the citizens take especial pride. It is very imposing architecturally, is finely appointed, and, as a public monopoly, is made to contribute to the municipal coffers while serving a sanitary end. Connected with it are the public cattle-markets, which well repay a visit on the weekly market-day for their splendid herds of the long-horned white oxen of Hungary and

Abattoirs and cattle-markets.

Servia. The produce-markets of Budapest, as of all other towns of southeastern Europe, are attended by great numbers of peasants in national costume, and are as picturesque as any scenes in the Orient. The imposition of new sanitary rules and regulations upon the conduct of business in the market-places has been a marked gain for the health of the people.

Produce-markets.

To continue with the new social establishments of the municipality, some mention must be made of the magnificent general hospital, built with separate brick pavilions, according to the most approved plans, and occupying spacious and beautiful grounds. In a wooded area on the edge of the city, sufficiently isolated without being inconveniently remote, has been built the new municipal hospital for epidemic diseases, which conforms to all the latest requirements of sanitary science. Budapest is at length bringing infectious diseases under control. The so-called "prophylactic" measures of obligatory reports by physicians, of prompt isolation of every case, of visits and instruction by the authorities to insure proper care and treatment, of control of the children of families in which are cases of such disease, and finally, of disinfection by the public authorities, are employed with success.

General hospital.

Epidemic hospital.

Prophylactic measures.

Budapest had a cholera visitation in September, 1892, that ended in February, 1893, with a record of 935 cases of illness and 525 deaths. The epidemic was remarkably well managed by the authorities. It was demonstrated that nearly every case of attack resulted from the use of unfiltered or imperfectly filtered water, those who were drinking pure water having entire immunity. It has also been shown by Mr. Körösi that typhoid, scarlet fever, diphtheria and other infectious diseases are three or four times as prevalent in the parts of the town that are not supplied

Cholera epidemic of 1892-93.

Another demonstration in favor of filtered water.

CHAP. IX. with filtered water as in those that have the best quality. As a result of these demonstrations, the city government has given prompt attention to a betterment of the entire supply.

The sewers. Attention has been given to street and domestic scavenging. The sewer-system, though not complete and perfect, is greatly improved. The Danube is so large a stream that it suffices to carry off all the refuse of the city, and no separation or "treatment" of sewage is necessary. Another important health-

Public baths. measure has been the establishment of free baths in the Danube, for summer use,—these institutions being well patronized,—and also the utilization by the authorities, for the benefit of the poor, of some of the hot sulphur springs, the curative properties of which in certain diseases are very famous. As a result of the various efforts to improve the health and social condition of the people, put forth intelligently and humanely by the public authorities, Budapest is fast exchanging its oriental unwholesomeness for the comparative healthfulness of an occidental city. Meanwhile Mr. Körösi's elaborate statistical analyses throw light from time to time upon every doubtful point, and his unequaled library of inter-municipal statistics enables him to furnish his constituency with stimulating comparative data.

The city and the gas-supply. The illumination of Budapest has been a monopoly in the hands of a private gas company whose original charter expired in 1881, and which obtained a renewed charter for some fifteen years longer. The city has obtained gas for street purposes at reduced rates; has obliged the company to mitigate its charge to consumers in accordance with a sliding scale based upon the increase in aggregate consumption; and moreover has collected very heavy taxes from the company. It reserved the right to take over the plant and business

Electric lighting.

at an appraised valuation, but was awaiting the development of electric lighting; and there was a strong probability that the municipality would decide to enter upon the business of manufacturing and selling the new illuminant, as a part of its varied programme of expansion fixed for the year 1896.

Street-railways.

Street transportation has also been kept under control by the municipality. A united tramway system (horse-traction) pays street rentals and large taxes. The company's fares are fixed by law, and it is required that working people shall be carried at reduced rates in the morning and evening. At the expiration of existing charters, the street-railway lines and their equipment will become the property of the city, without indemnity to the private owners. Upon the greater ring-street and several of the radial avenues the Budapest Electric City Railway Company operates a model system of lines upon the plan of an insulated trolley carried in a metallic underground conduit. The first of these lines was opened in 1889, and the company has steadily extended its tracks, under franchises that are conspicuously favorable to all public interests. From the technical point of view, the underground electrical current has been an unqualified success in Budapest, this Danubian city deserving credit for having led all the world in the adoption of advanced and perfect appliances in electrical street transit. The financial affairs of the company are as open to inspection as the accounts of any municipal department. After paying large taxes to the city, contributing to insurance and sick funds for its employees, making liberal yearly payments to a reserve tax fund, placing a considerable sum in the ordinary reserve fund, besides provisions for interest, and for a sinking-fund to redeem its bonds, the company was able in 1894 to pay the shareholders a dividend of 8

Underground electric trolley system.

Finances of the company.

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per cent. on the stock. This, however, was not because the company is extraordinarily prosperous, but in part because of excellent management, and above all things because the stock represents only the actual investment. The capitalization of the system is only 4,000,000 florins. An American street-railway company would hardly have been content to construct such a system and put it into operation without attempting to make it earn dividends on from five to ten times the amount that the Hungarian laws permit to stand as the capital to be remunerated.

Street-railways of all kinds have been excluded from the Andrássy-street; but this beautiful avenue is the most direct approach to the park in which the exhibition of 1896 is to be held; and it was decided that an underground road from the heart of the town on the Danube front ought to be constructed under the Andrássy-strasse to the exhibition grounds. Consequently, the horse railway company and the electric company applied for a joint franchise under which they were ready to unite in constructing, as a trunk-line connecting with both their systems, the most perfectly appointed underground road ever yet built, with electric motors, electric lighting, superior ventilation, and every convenience that ingenuity could suggest. It was expected that the project would be executed. Various narrow-gauge steam railways and electric overhead trolley lines run from Budapest to neighboring towns; and the whole region is gradually acquiring the varied and complete transit facilities of a metropolitan district. Two or three new bridges across the Danube will have been begun in 1896, and these links will permit the better union of the street-railway systems of the two halves of the town.

An underground electric road.

A varied and complete transit system.

The prospects for Budapest's continued growth as a Danubian metropolis are very bright. As the center

of the Hungarian State-railway system, its commercial importance is constantly enhanced by the development of the resources of the country and the corresponding increase of traffic. And it is no longer doubtful that the capital will be the gainer to an enormous extent by the new "zone tariff" put in operation on the State-railway system in August, 1889. This remarkable innovation in railroading entirely changes the passenger-ticket system. From Budapest as a center 14 zones are described, the first having a radius of 25 kilometers (about 15 miles). The second is a belt lying between the inner circle and an outer one drawn with a 40 kilometer radius; *i. e.*, its width is 15 kilometers. Successive zones have a radius from the Budapest center of 55, 70, 85, 100, 115, 130, 145, 160, 175, 200, and 225 kilometers, while to the fourteenth zone are assigned all distances on any of the Hungarian State lines that lie more than 225 kilometers away from the capital. For any point in each of these zones the fare is the same. The new rates are greatly reduced, being in some cases one half and in other cases less than one fourth the former rates. The average reduction is not far from two thirds. Railway bookkeeping is of course simplified by the new system, and traveling has received an unwonted stimulus. It is now conceded that the innovation is a success from the point of view of railway financiering; and it is even a more brilliant success from the point of view of the commercial and social progress of the capital city. It has given new movement and life to the sluggish population of the outlying parts of Hungary. The annual number of persons traveling by rail at once increased several-fold. The workingmen's tickets are so cheap, moreover, that it becomes readily feasible to mobilize labor at any point in Hungary where it is needed. Great results in like

Benefits from the "zone-tariff" system.

Main features of the system.

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manner are following the more recent adoption of zone tariffs and reduced rates for freight traffic. The "vicinity tariff" makes short rides very inexpensive and promotes the growth of outer suburbs, while bringing hosts of country people to the city on business errands. The statistical record of the changes in Hungarian habits of travel that have been brought about by the zone system and the era of low fares inaugurated by the lamented Gabriel von Baross, Hungary's daring and talented young minister of commerce and transportation, discloses the remarkable extent of an innovation that is destined to foster the rapid social and industrial development of the country, and above all to redound to the prosperity of Budapest. The city's population had grown from 355,682 on the last day of 1880, to 506,384 on December 31, 1890. There is much reason to think that the census of 1900 will show an even greater gain for the last decade of the century. Budapest in the millennial year 1896 would seem justified in estimating the population at nearly or quite 600,000.

"Vicinity tariff."

Growth of the city's population.

The educational, literary, and artistic progress of Budapest has been as striking since 1870 as its material progress. The educational system has been reformed and revivified from the bottom to the top. At the very apex is the University, under national auspices and support, an institution fairly comparable with the better universities of Germany. It suffered somewhat by the precipitate expulsion of the German faculty and the too sudden transformation from a German to a Hungarian basis. But it has recovered, and now has a truly national character and influence. Another important official educational establishment, the Royal Polytechnic Institute, with technical courses in engineering and applied science, flourishes at Budapest. Then comes a series of collegiate establish-

Educational system of Budapest.

ments, *gymnasien* and *real-schulen*, some of which are national and municipal, while others are denominational with public subventions. Below these are the advanced schools for boys and girls, corresponding in their work to our upper grammar- and lower high-school grades, and having certain industrial and practical features. On the same level are the mercantile and trade schools. And then come the numerous elementary schools, the accommodations of which are intended to be equal to the requirements of the Compulsory Education Act; for throughout Austria and Hungary elementary education has for a number of years been obligatory upon all. The children learn perfectly both the Hungarian and the German languages, and not infrequently they learn something of either French or English.

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Compulsory attendance.

Because devotion to their speech, and admiration of those who use it well as writers or orators, have always played so essential a part in the actual governmental and institutional life of the Hungarians, I may be pardoned for a word of digression about it. The Hungarians, like all the people of southeastern Europe, are ready linguists. But the ease with which they acquire other languages does not diminish their loyalty to their own. The Hungarian, or Magyar, speech has no affinity with the other languages of the Austro-Hungarian empire. It is more closely related to the Turkish than to any other tongue. It is a concise language, flexible, musical, and has a rich vocabulary; and its most enthusiastic defenders are men who cannot be charged with ignorance of the capabilities of the three leading languages of western Europe. An extensive and growing Magyar literature exists, and the book-shops of Budapest teem with new productions in all fields of thought. The press of Budapest is also very active. Indeed, the Hunga-

Influence of the Magyar language.

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Journalism and government.

rians claim that nowhere else in Europe is journalism so free, and so influential in molding opinion and guiding affairs. An extraordinary number of the leading men in the municipal government and in the national parliament are or have been journalists. A Budapest writer has lately remarked that "all the men who can be regarded as distinguished and important in the field of Hungarian politics stand in close relation to the press: Louis Kossuth was a journalist; Francis Deák entered upon his work of adjusting Hungarian and Austrian relations with a series of newspaper articles; and in the list of journalist statesmen stand the names of the brilliant Anton Csengery, Baron Sigismund Kemény, Moritz Jókai, Max Falk, Louis Csernátony; in a word, the most important of the public men of Hungary are journalists, for even the Prime Minister Tisza himself, in his time, when leader of the opposition, cultivated public opinion through the columns of a Hungarian journal." In Budapest alone there are now more than 230 different periodicals published in the Hungarian language, while there are at least forty in the German tongue. And there are a dozen important daily papers.

National and municipal theaters.

The musical and artistic activity of Budapest is very considerable, and it also has received great impetus from the causes which have led to the recent expansion of all interests in the Magyar capital. The government maintains a National Theater that has played an important part in the patriotic and intellectual life of the people, encouraging poetic and literary activity, and upholding the national speech. Even more successful, if possible, in these respects is the Volks Theater, which, supported by the municipal government and conducted upon the most popular plan, fills a prominent place in the life of the commu-

nity. The most imposing structure devoted to musical and dramatic art is the new Royal Opera, supported by the government, in the Andrássy-strasse. It is one of the two or three finest opera-houses in Europe, its magnificence hardly coming short of those in Vienna and Paris.

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Royal opera.

If Budapest were possessed of no other attractions whatsoever, its remarkable hot springs and mineral waters, unequaled for the variety of their curative properties by any other group of medicinal springs in the entire world, should give the place great fame. Its warm spring baths are very ancient. The Romans utilized them, and they called Buda "Aquincum" (Five-waters), with reference to the five springs that were known and used. The Huns also prized the healing waters; and finally the Turks, during their period of domination, built great public baths, and regarded the waters as possessed of the highest virtue. Some of these baths now belong to the municipality and others are private property. For the most part they lie on the Buda side of the river. Especially noted are the "Kaiser-bad," the "Lucas-bad," and the "Königs-bad," belonging to the Josephsberg group, and lying at the base of that conspicuous eminence. To the same group belong the baths of the Margareta Island. Comfortable hotels adjoin these springs, and the bathing establishments for the most part are commodious and even luxurious. A more beautiful health-resort than the "Margareten-Insel" can be found nowhere. Another group includes the "Raitzen-bad," the "Bruck-bad," and the "Blocks-bad," lying a little distance further down the river and in the vicinity of the Blocksberg promontory. On the other side of the city, in the Stadtwäldchen Park, the municipal authorities have a hot-sulphur-bath establishment, supplied with water by an artesian well nearly three

Historical springs and baths.

Municipal ownership of medicinal springs and baths.

CHAP. IX.

thousand feet deep. The saline constituents of these various sources are different, and some of the springs are recommended for one class of diseases, and some for another. The waters are used either externally, internally, or both, according to the case to be treated. There are in use some interesting old remains of Turkish bath-house architecture, notably one belonging to the municipality, the "Rudas-bad." The modern buildings are not magnificent, but they are handsome and comfortable.

The bitter-water springs.

On the edge of Buda, in a little plain surrounded by high hills, are the well-known "bitter-water" springs which have made the name of Hungary more famous perhaps than any other article of export. These curative mineral waters are bottled in vast quantities and sent to all parts of the world. The "Hunyadi" water, the "Franz-Joseph," the "Königs-bitter-wasser," and the "Rákóczy," are the best-known of these potent Budapest waters. It would be superfluous to discuss here their remedial qualities. But the baths, springs, and wells I have named, with various others in the immediate vicinity, constitute a marvelous endowment bestowed by nature upon this beautiful city, and beyond all doubt will be a source of very great wealth and fame in the future. As at Bath in England, these healing waters of Budapest may become at some time a property yielding a direct and large municipal revenue. They are already prized as a municipal asset of large prospective value. They also begin to bear a definite relation to the labors of the public health department and of the hospital and medical relief services, while enabling the city to give its citizens—virtually without cost—the luxury and benefit of a wonderful variety of public baths.

Prospective municipal revenue from baths, etc.

Enough has been said, perhaps, to show that Budapest has become in recent years one of the best-

appointed of modern cities. Its streets are handsome and clean, asphalt being the prevailing material of the new pavements; its drainage is good; its health-system is producing beneficent results; its water-supply is to be enlarged and perfected; its local transportation system is not merely adequate but exceptionally good; its building regulations are at length producing a well-constructed and handsome city; and its provisions for education and recreation are highly creditable. Its public buildings are of good architecture and of considerable variety. A splendid new building has been erected for the housing of the municipal government, the offices having been heretofore distributed among several city buildings. One of these, the famous "Redoute building," is an imposing structure containing a vast public hall for balls and entertainments, the ground floor being used as a fashionable restaurant and café. Of such buildings as hospitals, schools, academies of art and science, the city has a most creditable supply. I have mentioned already the new Hungarian Pantheon; and the celebrations of 1896 are also to include the opening of a palatial Museum of Art and History, a Museum of Artistic Handwork, and a new Palace of Justice, as well as the new Parliament buildings (which have cost 16,000,000 florins), and a permanent Exhibition Hall.

Public architecture.

Thus the Danube Valley has at length begun to show development under the magic of modern political, social, and industrial forces; and its progress within the coming half-century bids fair to exceed that of some newer regions of the Western world. Budapest proposes to wrest from Vienna the commercial ascendency of the lower Danube valley; and it is possible that there may be in store for it a very brilliant political future as the capital of a Danubian confederation that shall include Hungary and the

Progress in the Danube Valley.

CHAP. IX.

smaller states of the Southeast. That this is the ambition of many Hungarians is perfectly well known; and Hungary is preparing to play an unprecedentedly important rôle in the political life of Europe. But whatever may be the political future of the Austro-Hungarian empire and of the Balkan peninsula, it is now certain enough that Budapest is to take and hold its place among the great cities of the civilized world. Moreover, the example of Budapest is destined to quicken municipal progress in Sofia, Belgrade, Bucharest, Athens, and Odessa, and even in Constantinople itself. The early decades of the twentieth century will witness wonderful transformations in these and in other towns of southeastern Europe.

Budapest's place and influence.

# APPENDICES

# APPENDIX I

## THE BUDGET OF PARIS

### (AS INTRODUCED FOR THE YEAR 1894, CONDENSED.)

#### ORDINARY RECEIPTS.

| | FRANCS. |
|---|---|
| The Commune's levy of additional centimes, the dog tax, and certain other special impositions | 32,692,100 |
| Certain payments from the State of interest on funds in the Treasury, etc., etc. | 5,962,300 |
| Octroi | 149,259,548 |
| Fees for registration of births, marriages, etc., etc | 250,000 |
| The public markets | 8,030,825 |
| Public scales | 300,000 |
| Abattoirs | 3,420,000 |
| Entrepots | 3,086,400 |
| Income from municipal property | 1,982,400 |
| Taxes on funerals | 913,010 |
| Concessions, ground in cemeteries | 2,334,365 |
| Legacies and gifts for public charity | 31,428 |
| Concessions on streets and in public parks | 3,430,960 |
| Public vehicles (cabs, street cars, omnibuses, etc.) | 5,994,200 |
| Sewer taxes | 900,000 |
| Sale of old materials by public works department | 329,700 |
| Individual payments for part cost of paving and various public improvements | 4,315,186 |
| Appropriations from State and Department of the Seine toward maintenance of streets | 4,400,000 |
| Special street-cleaning and scavenging tax | 3,120,000 |
| Aggregate payments from Paris Gas Company | 16,500,000 |
| Receipts from waterworks | 15,666,550 |
| Operations of the *vidangeurs* (night-soil companies), etc. | 3,201,300 |
| Various receipts in connection with the educational institutions | 4,671,573 |
| Contribution of State to expenses of municipal police | 10,489,950 |
| Miscellaneous receipts | 2,781,325 |
| New resources to be created | 6,793,200 |
| Total Ordinary Receipts | 290,856,320 |

#### ORDINARY EXPENDITURES.

| | FRANCS. |
|---|---|
| Municipal debt,—interest and amortisement | 110,900,528 |
| Sums due the State, for collection of taxes, etc. | 6,371,200 |
| Administration of the octroi | 9,190,160 |
| General administrative expenses | 9,617,564 |
| Retirement pensions, etc. | 1,333,431 |
| Expenses of the arrondissement mairies | 872,600 |
| Cost of management of city property, markets, etc. | 1,496,956 |
| Inhumations | 1,356,870 |
| Military affairs and services of protection | 923,135 |
| "Garde républicaine" | 2,658,800 |
| Public works department, salaries, etc | 4,755,335 |
| Architecture and fine arts | 4,446,690 |
| "Voirie" | 1,554,465 |
| Street system | 24,397,360 |
| Parks, public lighting, etc. | 12,322,645 |
| Waterworks and sewer department | 8,556,080 |
| Collège Rollin and subventions to higher instruction | 1,542,790 |
| Public school system | 25,892,113 |
| Public charity of all kinds | 26,848,940 |
| Miscellaneous outlays | 429,484 |
| Prefecture of police | 29,520,330 |
| Fire department | 2,611,400 |
| Municipal laboratory | 371,550 |
| Commission to examine capacity of "cochers" | 27,500 |
| Reserve funds | 1,058,393 |
| Special reserve "non-disponible" | 1,800,000 |
| Total of Ordinary Expenses | 290,856,320 |

# APPENDIX II

## CONDENSED BUDGET (STADTHAUSHALT) OF BERLIN

| Departments. | 1891–'92. | | 1892–'93. | |
|---|---|---|---|---|
| | Income. In marks. | Outgo. In marks. | Income. In marks. | Outgo. In marks. |
| I. Kämmerei-Verwaltung, Comprising rentals of real estate owned by the city, etc. | 866,217 | 155,903 | 838,754 | 155,082 |
| II. Department of Municipal Works, | | | | |
| 1. (a) Net surplus earnings of gas-works | 5,186,279 | ..... | 4,607,276 | ..... |
| (b) Income from accumulated gas-works reserve fund | 465,450 | ..... | 465,450 | ..... |
| 2. Waterworks, net surplus profits | 2,254,320 | ..... | 2,405,065 | ..... |
| 3. Sewer-works, net deficit of department | ..... | 2,382,379 | ..... | 2,526,765 |
| 4. Central cattle-market, net profits | 368,838 | ..... | 330,065 | ..... |
| III. Tax Department, | | | | |
| 1. Rent tax | 12,320,370 | } 29,249 | 12,740,371 | } 21,754 |
| 2. House tax | 5,537,061 | | 5,821,205 | |
| 3. Dog tax | 320,020 | 2,780 | 396,388 | 6,657 |
| 4. Municipal income tax | 18,491,936 | 338,731 | 16,151,882 | 295,592 |
| 5. Malt tax | 550,941 | ..... | 558,105 | ..... |
| IV. Capital and Debt Department, Total receipts and outgoes on account of various departments of public works. | 12,122,610 | 13,857,349 | 12,331,233 | 14,267,265 |
| V. Educational Department, Common schools, higher instruction, etc. | 2,052,126 | 13,136,712 | 2,066,357 | 13,644,849 |
| VI. Poor-relief Department, Aggregate accounts of all forms of charitable aid | 1,469,250 | 8,415,319 | 1,038,052 | 8,774,517 |
| VII. Health and Hospital Department, Various institutions and agencies | 959,032 | 4,137,841 | 988,036 | 4,495,468 |

| Departments. | 1891–'92. Income, In marks | 1891–'92. Outgo. In marks. | 1892–'93. Income. In marks. | 1892–'93. Outgo. In marks. |
|---|---|---|---|---|
| VIII. Park and Garden Department, | | | | |
| Total of ordinary items.... | 21,324 | 519,019 | 44,220 | 864,394 |
| Establishment of Victoria Park..... | 2,500,000 | 2,194,275 | ..... | ..... |
| IX. Building Department, | | | | |
| 1. Administration, repair, and construction of municipal buildings ..... | 3,007,813 | 6,326,341 | 2,607,189 | 6,145,027 |
| 2. Street and bridge work.. | 5,572,906 | 13,919,527 | 7,477,473 | 14,328,596 |
| X. Costs of Administration, Various fees and salaries of municipal servants..... | 758,498 | 6,751,381 | 972,242 | 7,175,611 |
| XI. Police Administration. Including municipal night-watch, and fire department. | 569,163 | 3,290,154 | 584,398 | 3,331,669 |
| XII. Lighting, Cleaning, and Sprinkling of Streets. | 127,545 | 2,283,976 | 164,121 | 2,915,452 |
| XIII. Various Receipts and Expenses..... | 8,930,152 | 3,695,385 | 11,391,251 | 1,030,681 |
| General Total ..... | 84,471,095 | 81,436,322 | 84,007,960 | 79,979,379 |
| Gross Revenues and Expenditures. | | | | |
| The above accounts include only the net balances of gain or loss for the eight departments that have their own distinct treasuries. These are (1) the Gas-works, (2) Water-works, (3) Sewers and sewage farms, (4) Cattle-markets, (5) Abattoirs, (6, 7, and 8) various market establishments. | | | | |
| Total incomes and outgoes of these special treasuries..... | 65,538,524 | 54,204,087 | 61,403,640 | 51,231,433 |
| Operations of the Central Municipal Treasury, as shown above.. | 84,471,095 | 81,436,322 | 84,007,960 | 79,979,379 |
| Total ..... | 138,491,518 | 124,122,308 | 133,864,592 | 119,663,804 |

# APPENDIX III.

## THE FRENCH MUNICIPAL CODE.

### CHIEF PROVISIONS OF THE LAW OF APRIL 5, 1884, ON MUNICIPAL ORGANIZATION.

### TITLE I. THE COMMUNES.

ART. 1. The municipal corps of each commune is composed of the municipal council, the mayor, and one or more adjuncts.

ART. 2. A change in the name of a commune is effected by order of the President of the Republic on demand of the municipal council, the council-general and the Council of State consenting.

ART. 5. A new commune cannot be erected except by virtue of a law, upon the advice of the council-general, the Council of State consenting.

### TITLE II. THE MUNICIPAL COUNCILS.

#### CHAPTER I.—FORMATION OF THE MUNICIPAL COUNCILS.

ART. 10. The municipal council is composed of 10 members in communes of 500 inhabitants or less;

| | | | | |
|---|---|---|---|---|
| of 12 | in those of | 501 to | 1,500 | inhabitants; |
| 16 | " | 1,501 to | 2,500 | " |
| 21 | " | 2,501 to | 3,500 | " |
| 23 | " | 3,501 to | 10,000 | " |
| 27 | " | 10,001 to | 30,000 | " |
| 30 | " | 30,001 to | 40,000 | " |
| 32 | " | 40,001 to | 50,000 | " |
| 34 | " | 50,001 to | 60,000 | " |
| 36 | " | 60,001 or more. | | |

In towns divided into several mayoralties [Paris and Lyons] the number of councilors will be increased by three for each mayoralty.

ART. 11. The election of members of the municipal council is by a general ticket (*scrutin de liste*) for the entire commune.

Nevertheless, the commune may be divided into electoral sections, each of which will elect a number of councilors proportioned to the number of registered electors, but only in the two following cases:

(1) When it is composed of several distinct and separate groups of inhabitants; in this case, no district may have less than two councilors;

(2) When the total population of the commune is more than 10,000 in-

habitants. In this case, a section cannot be composed of parts of territory belonging to different cantons or municipal arrondissements. Parts of territory having their own property (*des biens propres*) cannot be divided between different electoral districts.

No one of these sections may have less than four councilors.

In every case where the division into sections is authorized, each must be composed of contiguous territory.

ART. 13. The prefect may, by a special order published at least ten days in advance, divide the commune into a number of voting precincts which will concur in the election of the same councilors.

An electoral ticket will be delivered to each elector; this ticket will indicate the location of the polls at which he is to vote.

ART. 14. The municipal councilors are elected by direct universal suffrage.

All French citizens of the age of twenty-one years and upwards, not coming within any case of incapacity provided for by law, are electors.

The electoral lists include: (1) all electors who have their real domicile in the commune and have lived there for at least six months; (2) those who have been entered on the list for one of the four direct taxes or on the list for the road duty (*prestations en nature*), and, if they do not reside in the commune, have declared their intention of exercising their electoral rights there. The members of the families of the electors comprised under the head of the *prestation en nature*, even though they are not personally included, and the inhabitants who, by reason of their age or their health, have ceased to be subject to this duty, are also registered by the terms of this paragraph; (3) those who by virtue of article 2 of the treaty of May 10, 1871, have chosen French nationality and declared their residence to be fixed in the commune, in conformity with the law of June 19, 1871; (4) those who are subject to an obligatory residence in the commune in the capacity either of ministers of religious bodies recognized by the State, or of public officials.

Citizens who, not fulfilling the conditions of age and residence above indicated at the time of the making of the lists fulfil them before the final closure, are likewise registered.

Absence from the commune resulting from military service will not involve any prejudice to the rules above set forth for registration on the electoral lists.

ART. 15. The assembly of electors is convened by order of the prefect.

The order of convocation is published, in the commune, at least fifteen days before the election, which must always take place on Sunday. It fixes the place where the balloting will take place, as well as the hours at which it is to be begun and concluded.

ART. 16. When there is occasion to elect successors of municipal councilors elected by sections, in conformity with article 11 of this law, these elections will be held by the sections to which the councilors belong.

ART. 17. The polls are presided over by the mayor, the adjuncts, the municipal councilors in the order of the list, and, in case they are prevented, by electors designated by the mayor.

ART. 18. The president alone has police authority over the assembly. This assembly cannot consider other matters than the election which is assigned to it. All discussion and all deliberation are forbidden.

ART. 20. The balloting continues only one day.

ART. 30. No one is elected on the first ballot unless he has received : (1) an absolute majority of the votes cast; (2) a number of votes equal to one fourth the number of registered electors. On the second ballot, the election is by relative majority, whatever the number of voters. If different candidates obtain the same number of votes the oldest is declared elected.

In the case of a second ballot the assembly is convened by law on the following Sunday. The mayor makes the necessary announcements.

ART. 31. All the electors of the commune and the citizens entered on the list for direct taxes, or proving that they should be so entered on the first of January of the year of election, of the age of twenty-five years and upwards, are eligible to the municipal council, subject to the restrictions expressed in the last paragraph of this article, and in the two following articles.

However, the number of councilors who do not reside in the commune at the time of election must not exceed one fourth of the members of the council. If it exceeds this number, the preference is determined according to the rules laid down in article 49.

Soldiers and employees of the land and sea armies in active service are not eligible.

ART. 32. The following cannot be municipal councilors:

(1) Persons deprived of the electoral right;

(2) Those who are provided for by a judicial council (conseil judiciaire);

(3) Those who are exempted from contributing to the communal taxes and those who are aided by the bureaus of beneficence;

(4) Domestics attached exclusively to the person.

ART. 33. The following are not eligible in the jurisdiction in which they perform their functions:

(1) The prefects, sub-prefects, secretaries general, and councilors of the prefecture; and, in the colonies governed by this law, the governors, directors of the interior, and members of the privy council;

(2) The commissaries of police and police officers;

(3) Magistrates of courts of appeal and of tribunals of first instance, with the exception of substitute judges to whom examination (*l'instruction*) is not entrusted;

(4) The incumbent justices of the peace;

(5) The accountants of the communal funds and the contractors for municipal services;

(6) The public school teachers;

(7) The employees of the prefecture and of the sub-prefecture;

(8) The engineers and conductors of bridges and embankments (*chaussées*) charged with service on the city and parish roads (*voirie urbaine et vicinale*), and the overseers of roads;

(9) Ministers in the exercise of a legally recognized form of worship;

(10) Salaried agents of the commune, among whom are not included those who, being public functionaries or exercising an independent profession, receive pay from the commune only by reason of the services which they render in the practice of their profession.

ART. 34. The functions of municipal councilor are incompatible with those:

(1) Of prefect, sub-prefect, and secretary general of a prefecture;

(2) Of commissary of police and police officer;

(3) Of governor, director of the interior, and member of the privy council in the colonies.

The officials named in this article who are elected members of a municipal council will have ten days' time, beginning with the proclamation of the result of the ballot, in which to choose between the acceptance of the mandate and continuance in office. In default of a declaration addressed within this time to their superior officers, they will be considered to have chosen to continue in office.

ART. 35. No one can be a member of more than one municipal council.

Ten days' time, counting from the proclamation of the result of the ballot, is allowed to a municipal councilor chosen in more than one commune in which to make his declaration of choice. This declaration is addressed to the prefects of the departments interested.

If, within this time, the councilor-elect has not made known his choice, he is assigned by law to the council of the commune in which the number of electors is the least.

In communes of 501 inhabitants or more, ancestors and descendants, brothers, and marriage relations of the same degree, cannot be simultaneously members of the same municipal council.

Article 49 is applicable to the case covered by the preceding paragraph.

ART. 41. The municipal councils are elected for four years. They are renewed in their entirety, on the first Sunday in May, throughout France, even when they have been elected in the interval.

ART. 42. When the municipal council is found to be reduced by unexpected vacancies to three fourths of its members, complementary elections are held within the period of two months, counting from the last vacancy.

However, in the six months preceding the entire renewal, the complementary elections are not obligatory except where the municipal council has lost more than half its members.

In the communes which are divided into districts, partial elections are always held when a district has lost half its councilors.

ART. 43. A municipal council can be dissolved only by a decree issued by the President of the Republic in the council of ministers and published in the *Journal officiel*, and, in the colonies governed by this law, by order of the governor in privy council, inserted in the official journal of the colony.

In case of urgency, it may be provisionally suspended by an order issued by the prefect, who must immediately report to the Minister of the Interior.

The duration of the suspension cannot exceed one month. In the colonies above specified, the municipal council may be suspended by an order issued by the governor. The duration of the suspension cannot exceed one month.

ART. 44. In case of the dissolution of a municipal council or the resignation of all its actual members and when no municipal council can be created, a special delegation performs its functions.

In the eight days following the dissolution or the acceptance of the resignation, this special delegation is appointed by decree of the President of the Republic, and, in the colonies, by order of the governor.

The number of members composing it is fixed at three in communes where the population does not exceed 35,000 inhabitants. The number may be increased to seven in towns of a greater population.

### CHAPTER II.—FUNCTIONS OF THE MUNICIPAL COUNCILS.

ART. 46. The municipal councils meet in ordinary session four times a year: in February, May, August, and November.

The length of each session is fifteen days; it may be prolonged by the authorization of the sub-prefect.

The session during which the budget is discussed may last six weeks.

During the ordinary sessions the municipal council may consider any matter which comes within its powers.

ART. 47. The prefect or the sub-prefect may order an extraordinary convocation of the municipal council. The mayor also may call the municipal council together whenever he considers it necessary. He is bound to convene it when requested so to do by a majority of the municipal council. In either case, at the time when he summons the council, he gives notice to the prefect or the sub-prefect of the meeting and the reasons which render it necessary.

The order of convocation contains a statement of the special and stated objects for which the council is to assemble, and the council may consider only these matters.

ART. 48. Every order of convocation is issued by the mayor. It is mentioned on the record of proceedings, posted on the door of the mayoralty and addressed in writing to the residences, three days at least before the day of the meeting.

In case of urgency, the delay may be shortened by the prefect or the sub-prefect.

ART. 49. The municipal councilors rank in the order of the list.

The order of the list is determined, even when there are electoral districts: (1) by the date of the first election; (2) between councilors elected the same day, by the greatest number of votes obtained; (3) and, in case of equality of votes, by priority of age.

ART 50. The municipal council may deliberate only when a majority of its members exercising their functions are present at the meeting.

When, after two successive convocations, duly issued with an interval of

at least three days, the municipal council is not assembled in sufficient number, the proceedings held in accordance with the third convocation are valid, whatever the number of members present.

ART. 51. Questions are decided by an absolute majority of those voting. In case of a tie, except in the case of a secret ballot, the vote of the president is decisive. The vote is taken publicly on demand of one fourth of the members present; the names of the voters, with their votes, are entered upon the record.

The voting is by secret ballot whenever one third of the members present request it, or in the case of an election or nomination.

In the latter case, after two secret ballots, if none of the candidates has obtained an absolute majority, a third ballot is taken, and the election is decided by relative majority; in case of a tie, the oldest is declared elected.

ART. 52. The mayor, or, in his default, his substitute, presides over the municipal council.

In the sessions in which the official statements of the mayor are debated, the municipal council elects its president.

In this case, the mayor may, even though he is no longer in office, take part in the discussion; but he must retire at the time of the vote. The president reports the proceedings directly to the sub-prefect.

ART. 53. At the beginning of each session the municipal council appoints one or more of its members to perform the functions of secretary during its continuance.

ART. 54. The sessions of the municipal councils are public. Nevertheless, on demand of three members or of the mayor, the municipal council, by a rising vote without debate, decides whether it will resolve itself into a secret committee.

ART. 59. The municipal council may appoint, in the course of each session, committees charged with studying questions submitted to the council either by the administration or by the initiative of one of its members.

The committees may hold their meetings in the interval between the sessions.

They are convened by the mayor, who is their president by law, within the eight days following their appointment, or in a shorter time on a demand of a majority of the members composing them. In this first meeting, the committees appoint a vice-president who may convene and preside over them, if the mayor is absent or prevented from acting.

ART. 60. Every member of the municipal council who, without reasons recognized as legitimate by the council, has missed three successive sessions, may, after having been permitted to make his excuses, be declared by the prefect to have resigned, subject to appeal within ten days of the notification to the council of the prefecture.

### CHAPTER III.—POWERS OF THE MUNICIPAL COUNCILS.

ART. 61. The municipal council regulates by its deliberations the affairs of the commune.

It gives its advice whenever such advice is required by the laws and regulations, or when it is demanded by the superior administration.

It protests, if there is occasion, against the quota assigned to the commune in the levying of the apportioned taxes.

It votes on all subjects of local interest.

It makes out each year a list containing a number double that of the assessors and substitute assessors to be appointed; and from this list the subprefect appoints the five assessors required by article nine of the law of 3 *frimaire an VII*, and the five substitute assessors.

ART. 63. The following are null by law:

(1) Proceedings of a municipal council bearing upon a subject foreign to its powers or carried on outside of its legal meeting.

(2) Proceedings in violation of a law or a regulation of public administration.

ART. 68. Proceedings bearing upon the following subjects take effect only after having been approved by the superior authority:

(1) The conditions of leases the duration of which exceeds eighteen years;

(2) The alienation and exchange of communal property;

(3) The acquisition of immovables; new buildings; the entire or partial reconstruction of buildings; the projects, plans and estimates of important repairs and of maintenance, when the expense, added to the expenses of the same nature during the current fiscal year, exceeds the limits of the ordinary and extraordinary resources which the communes may raise without special authorization;

(4) Contracts;

(5) A change in the use of communal property already devoted to a public service;

(6) Waste pasture land;

(7) The classification, reclassification, straightening or lengthening, the enlargement, abolition and naming of streets and public places, the creation and abolition of walks, squares or public gardens, market places, shooting places, or race courses, the establishment of plans for the laying out and leveling of the municipal public ways, modifications of the plans of construction adopted, the tariff of highway duties (*droits de voirie*), the tariff of fees for stands and locations on any part of the main public highways, and, in general, tariffs of the various dues to be collected for the profit of the communes by virtue of Art. 133 of this law;

(8) The acceptance of gifts and legacies made to the commune when there are charges or conditions or when they give way to the demands of the families;

(9) The communal budget;

(10) The supplementary credits;

(11) Extraordinary contributions and loans, except in the case provided for by Art. 141 of this law;

(12) The octrois, in the cases provided for by Art. 137 and 138 of this law;

(13) The establishment, the abolition or the removal of fairs and markets other than the simple markets of supply.

ART. 70. The municipal council is always asked to give its advice on the following matters:

(1) Regulations relative to public worship;

(2) Regulations relative to the distribution of public aid;

(3) Projects for the laying out and leveling of the main thoroughfares in the interior of cities, towns, and villages;

(4) The creation of bureaus of beneficence (*bureaux de bienfaisance*);

(5) The budgets and accounts of hospitals, alms-houses, and other charitable and benevolent establishments, and of vestries and other managing boards of religious bodies whose ministers are salaried by the State; authorizations to acquire, alienate, borrow, exchange, sue or compromise (*transiger*), requested by the same establishments; the acceptance of gifts and legacies which are made to them;

(6) In short, all matters on which the municipal councils are required by the laws and regulations to give their advice, and those on which they are consulted by the prefect.

When the municipal council, regularly summoned and convened for the purpose, refuses or neglects to give its advice, the matter may be decided without it.

ART. 71. The municipal council considers the official reports which are annually submitted to it by the mayor, in conformity with Art. 151 of this law.

It hears, debates and acts upon the accounts of the receivers, subject to final disposition, in conformity with Art. 157 of this law.

## TITLE III.—THE MAYORS AND THE ADJUNCTS.

ART. 73. There are in each commune a mayor and one or more adjuncts elected from among the members of the municipal council.

The number of adjuncts is one in communes of 2,500 inhabitants or less, and two in those of 2,501 to 10,000. In communes of a greater population, there will be one additional adjunct for every additional 25,000 inhabitants, but the number of adjuncts will not exceed twelve except in the city of Lyons, where the number is fixed at seventeen.

The city of Lyons continues to be divided into six municipal arrondissements. The mayor specially delegates two of his adjuncts to each of the arrondissements. They are charged with keeping the civil registers (*registres de l'état civile*) and with the other duties fixed by the regulation of the public administration of June 11, 1881, made in execution of the law of April 21, 1881.

ART. 74. The functions of the mayors, adjuncts, and municipal councilors are performed gratuitously. They are entitled only to reimbursement for the expenses which the execution of special mandates (*mandats speciaux*) makes necessary. The municipal councils may vote to reimburse the

mayor for the expenses of representation out of the ordinary resources of the commune.

ART. 76. The municipal council elects the mayor and the adjuncts from among its own members, by secret ballot and by absolute majority.

If, after two ballots, no candidate has obtained an absolute majority, a third ballot is taken and the election is decided by relative majority. In case of a tie, the older is declared elected.

ART. 77. The meeting in which an election for mayor is held is presided over by the oldest member of the municipal council.

For every election of a mayor or adjuncts, the members of the municipal council are convened according to the forms and delays prescribed by Art. 48; the order of convocation contains special mention of the election which is to be held.

Before this convocation, there will be held any elections which may be necessary to complete the municipal council. If, after the complementary elections, new vacancies occur, the municipal council will proceed nevertheless to the election of the mayor and the adjuncts, unless it is reduced to three-fourths of its members. In that case, recourse will be had to new complementary elections. They will be held in the course of one month, dating from the last vacancy.

ART. 78. The results of the election are made public within twenty-four hours, by means of a placard on the door of the mayoralty-house. They are, within the same length of time, reported to the sub-prefect.

The agents and employees of the financial administrations, paymasters general, special receivers, and collectors, agents of the forests, those of the post and telegraph, and the guards of public and private *(particulier)* establishments, cannot be mayors or adjuncts or perform their functions even temporarily.

The salaried agents of the mayor cannot be adjuncts.

ART. 81. The mayor and adjuncts are elected for the same term as the municipal council.

They continue in the performance of their functions, except as provided by Arts. 80, 86, and 87 of the present law, until the installation of their successors.

However, in the case of entire renewal, the functions of the mayor and adjuncts are, from the installation of the new council until the election of the mayor, performed by the municipal councilors in the order of the list.

ART. 82. The mayor alone is charged with administration; but he may, under his supervision and responsibility, delegate by order a part of his functions to one or more of his adjuncts, and in the absence of the adjuncts or in case they are prevented, to members of the municipal council.

These delegations remain in force until they are revoked.

ART. 83. In case the interests of the mayor are found to be in opposition to those of the commune, the municipal council designates another of its members to represent the commune either in courts of law or in contracts.

ART. 84. In case of absence, suspension, removal or any other hindrance,

the mayor is provisionally replaced, in all his functions, by an adjunct, in the order of appointment; and in default of adjuncts, by a municipal councilor, designated by the council or else taken in the order of the list.

ART. 85. In case the mayor refuses or neglects to perform any of the acts which are prescribed for him by law, the prefect may, after having demanded it of him, proceed to the duty in person, or by a special deputy.

ART. 86. Mayors and adjuncts may be suspended by order of the prefect for a time which shall not exceed one month, and which may be extended to three months by the Minister of the Interior.

They cannot be removed except by order of the President of the Republic.

Removal involves, by virtue of law, ineligibility to the functions of mayor and those of adjuncts, during one year from the date of the order of removal, unless a general renewal of the municipal council takes place in the mean time.

ART. 87. In the case provided for and regulated by Art. 44, the president and, in his default, the vice-president of the special delegation performs the functions of the mayor.

His powers come to an end at the installation of a new council.

ART. 88. The mayor appoints to all the communal offices (*emplois*) for which the laws, decrees, orders and ordinances in force at the time do not fix a special law of appointment.

He suspends and dismisses the incumbents of these offices.

He may cause the agents appointed by him to be sworn and commissioned, but on condition that they are approved by the prefect or sub-prefect.

ART. 89. When the mayor proceeds to a public adjudication on account of the commune, he is assisted by two members of the municipal council designated in advance by the council, or, in default of this designation, named in the order of the list.

ART. 90. It is the duty of the mayor, under the control of the municipal council and the supervision of the superior administration:

(1) To preserve and administer the property of the commune, and to perform, in consequence, all acts conservative of its rights;

(2) To manage the revenues, to supervise the communal establishments and the communal accounts;

(3) To prepare and propose the budget and order the payment of expenses;

(4) To direct the communal works;

(5) To make provision for measures relating to the municipal highways;

(6) To sign agreements, to make leases of property and contracts for communal work, in the manner established by the laws and regulations and by Arts. 68 and 69 of this law.

(7) To make in the same manner, deeds of sale, exchange, partition, acceptance of gifts or legacies, acquisition, or bargain, when these acts have been authorized in conformity with this law;

(8) To represent the commune in courts of law, either as plaintiff or as defendant;

And, in general, to execute the will of the municipal council.

ART. 91. The mayor is charged, under the supervision of the superior administration, with municipal and rural police authority, and the execution of orders of the superior authority relative thereto.

ART. 92. The mayor is charged, under the authority of the superior administration:

(1) With the publication and execution of the laws and regulations;

(2) With the execution of measures of general safety;

(3) With the special functions which are assigned to him by law.

ART. 94. The mayor issues orders for the purpose:

(1) Of ordering local measures on the matters entrusted by law to his vigilance and his authority;

(2) Of publishing the laws and police regulations and calling the attention of the citizens thereto.

ART. 95. The orders issued by the mayor are dispatched immediately to the sub-prefect, or, in the arrondissement of the chief town of the department, to the prefect.

The prefect may annul them or suspend their execution.

Those orders which contain permanent regulations do not take effect until one month after the sending back of the duplicate authenticated by receipts given by the sub-prefect or the prefect.

Nevertheless, in case of urgency, the prefect may authorize immediate execution.

ART. 97. The municipal police authority has for its object the public order, safety and health.

It includes especially:

(1) Whatever concerns the safety and convenience of passage on the public streets, wharves, places and ways, which includes cleaning, clearing, the removal of obstructions, the destruction or repair of dangerous buildings, prohibiting the exposure of anything on window-sills, or other parts of buildings which might cause any injury by falling, or the throwing of anything which might injure passers-by, or cause noxious exhalations;

(2) The duty of suppressing violations of public quiet, such as quarrels and disputes accompanied by disorder in the streets, tumults in places of public assembly, mobs, nocturnal disturbances and gatherings which disturb the sleep of the people, and all acts of a nature prejudicial to the public tranquillity;

(3) The maintenance of order in places where there are great assemblages of people, such as the fairs, markets, public rejoicings and ceremonies, spectacles, plays, cafés, churches and other public places;

(4) The mode of conveyance of dead persons, burials and exhumations, the maintenance of order and decency in the cemeteries; but it is permissible to make distinctions or particular rules by reason of the belief or the religion of the deceased or the circumstances which accompanied his death;

(5) Inspection as to honesty in the sale of goods sold by weight or measure, and as to the wholesomeness of eatables exposed for sale;

(6) The duty of preventing, by suitable precautions, and of stopping, by the distribution of necessary assistance, accidents and calamities, such as fires, floods, epidemic or contagious diseases and distempers, if necessary calling for the intervention of the superior administration;

(7) The duty of provisionally taking any necessary measures against lunatics whose condition might compromise the public morality, the security of persons or the preservation of property;

(8) The duty of preventing or remedying untoward occurrences which might be occasioned by the straying of harmful or ferocious animals.

ART. 98. The mayor has police authority over the national and departmental routes, and over the interior ways of communication, but only in matters concerning traffic in the said ways.

He may, on the payment of fees fixed by a tariff duly established, subject to the reservations stated in Art. 7 of the law of 11 *frimaire an VII*, give permits for stands or temporary stations on the public ways, on the rivers, ports and wharves, and in other public places.

Individual alignments, building permits, and other street permissions are given by the competent authority after the mayor has given his advice, whenever he is not competent to give them himself.

Privileges in the public streets by precarious title or essentially revocable, the granting of which is included in the powers of the mayor, and having for their object especially the laying in public soil of pipes for the passage or conveyance either of water or of gas, may, in case of a refusal of the mayor not justified by the general interest, be accorded by the prefect.

ART. 99. The powers which pertain to the mayor, in virtue of Art. 91, are no hindrance to the right of the prefect to take, for all of the communes of the department or any of them, and in all cases in which they have not been provided for by the municipal authorities, all measures relative to the maintenance of the public health, safety and tranquillity.

This right cannot be exercised by the prefect with respect to any commune until after a demand in due form of law to the mayor proves of no avail.

ART. 103. In cities having more than 40,000 inhabitants the organization of the body charged with police service is regulated by a decree of the President of the Republic, upon the advice of the municipal council.

If a municipal council should not allow the funds necessary for the expense or should allow only an insufficient sum, the grant necessary will be entered on the budget by a decree of the President of the Republic, the council of state consenting.

In all communes, the inspectors of police, the brigadiers, under-brigadiers, and the police officers named by the mayor must be approved by the subprefect or the prefect. They may be suspended by the mayor, but the prefect alone may remove them.

ART. 106. The communes are civilly responsible for injury and damage resulting from crimes or offenses committed by open force or violence in their territory by mobs or assemblies, armed or unarmed, whether to persons or to public or private property.

The damages for which the commune is responsible are apportioned among the inhabitants resident in the said commune by means of a special list, including the lists of the four direct taxes.

ART. 107. If the mobs or armed assemblies were composed of the inhabitants of more than one commune, each one is responsible for the injury and damage caused, in the proportion fixed by the tribunals.

ART. 108. The provisions of Articles 106 and 107 are not applicable:

(1) When the commune is able to prove that all measures in its power were taken for the purpose of preventing the mobs or assemblies, and of ascertaining the perpetrators;

(2) In communes where the municipality has not the disposition of the local police or the armed force;

(3) When the damages caused are the result of an act of war.

ART. 109. The commune declared responsible may exercise its recourse against the perpetrators of the disorder and their accomplices.

## TITLE IV.—THE ADMINISTRATION OF THE COMMUNES.

### CHAPTER I.—THE COMMUNAL PROPERTY, WORKS AND ESTABLISHMENTS.

ART. 110. The sale of the movable and immovable property of the communes other than that which is in public use may be authorized on the demand of any creditor, having a writ of execution, by a decree of the President of the Republic, which fixes the manner of sale.

ART 116. Two or more municipal councils, by the mediation of their presidents, and after having notified the prefects, may make an agreement between themselves on matters of communal utility comprised within their powers and which interest at the same time their respective communes.

They may agree to undertake or maintain at common expense works or institutions of common utility.

ART. 117. Questions of common interest are debated in a conference in which each municipal council is represented by a special commission elected for this purpose and composed of three members elected by secret ballot. The prefects and sub-prefects of the departments and arrondissements in which the interested communes are situated may always take part in these conferences. The decisions which are there reached take effect only after they have been ratified by all the municipal councils interested, and subject to the reservations stated in Chapter 3 of Title IV. of this law.

### CHAPTER II.—JUDICIAL ACTIONS.

ART. 121. No commune or part of a commune may appear in court to sue without being authorized by the council of the prefecture, except in the cases provided for by Articles 122 and 154 of this law.

After a judgment is given the commune cannot sue before another degree of jurisdiction except by virtue of a new authorization by the council of the prefecture.

ART. 122. The mayor may always, without previous authorization, institute or defend any action of possession, and perform all conservatory acts or acts interrupting forfeitures.

ART. 128. When a section of a commune proposes to institute or defend a judicial action, either against the commune of which it is a part, or against another section of the same commune, a distinct syndical commission is formed for the section and for each of the sections interested.

ART. 129. The members of the syndical commission are chosen from among the eligibles of the commune and elected by the voters of the section who live within it and by those persons who, not being on the electoral lists, are landed proprietors in the section.

ART. 131. The section which has obtained a judgment against the commune or another section is not liable to the charges or taxes imposed for the payment of the resulting costs and damages.

The same is true of any party suing a commune or section of a commune.

## CHAPTER III. THE COMMUNAL BUDGET.

### SECTION I.—RECEIPTS AND EXPENDITURES.

ART. 132. The communal budget is divided into the ordinary budget and the extraordinary budget.

ART. 133. The receipts of the ordinary budget consist of:

(1) The income of all property of which the inhabitants do not have the enjoyment in kind [common pastures, forests, etc.];

(2) Assessments imposed annually upon those having the right to benefits which they receive in kind;

(3) The proceeds of the ordinary and special centimes assigned to the communes by the fiscal laws;

(4) The proceeds of the portion accorded to the commune out of certain of the taxes and dues gathered on account of the State;

(5) The proceeds of the municipal octrois devoted to ordinary expenses;

(6) The proceeds of license fees collected from halls, fairs, markets, and abattoirs according to tariffs duly established;

(7) The proceeds from permits for stands and locations upon the public roads, upon the rivers, ports, and wharves, and in other public places;

(8) The proceeds of the communal tolls, the weighing, measuring and gaging fees, the highway tolls (*droits de voirie*), and other legally established fees:

(9) The revenue from the communal lands used for purposes of burial, and of the part of the price of concessions in the cemeteries accruing to the commune; *

(10) The proceeds from water concessions, concessions for the removal of mud and rubbish from the public roads, and other authorized concessions for communal services;

* Two thirds; the remaining one third is devoted to charity.

(11) The receipts for copies of administrative and civil acts;

(12) The portion of the products of fines imposed by the police courts (*tribunaux de police correctionnelle et de simple police*) which the laws assign to the communes;

(13) The proceeds of the sweeping tax in the communes of France and Algiers in which it is established, on their demand, in conformity with the provisions of the law of March 26, 1873, by virtue of a decree issued in the form of regulations of public administration;

(14) And in general the proceeds of contributions, taxes and fees the collection of which is authorized by law in the interest of the communes, and of all the annual and permanent resources, in Algiers and in the colonies, the collection of which is authorized by the laws and decrees.

The establishment of *centimes* on account of insufficiency of revenues is authorized by order of the prefect when required for obligatory expenses.

In other cases it is approved by decree.

ART. 134. The receipts of the extraordinary budget consist of:

(1) Extraordinary contributions duly authorized;

(2) The price of alienated property;

(3) Gifts and legacies;

(4) Payments of exigible principal and recoverable interest;

(5) The proceeds from the extraordinary cutting of wood [from public forests];

(6) The proceeds of loans;

(7) The proceeds of taxes or additional taxes of *octroi* specially devoted to extraordinary expenses and the repayment of loans;

(8) And all other accidental receipts.

ART. 135. The expenditures of the ordinary budget comprise the annual and permanent expenditures of communal utility.

The expenses of the extraordinary budget comprise the accidental or temporary expenditures which are paid from the receipts enumerated in Art. 134 or from the surplus of the ordinary receipts.

ART. 136. The following expenditures are obligatory upon the communes:

(1) The maintenance of the town hall, or, if the commune has none, the renting of a house or hall to take its place;

(2) Office expenses and the expense of printing for the service of the commune, of preservation of the communal archives and of the collection of the administrative acts of the department; the expense of subscription to the *Bulletin des communes** and, for the communes which are the chief towns of the canton, the expense of subscription to and preservation of the *Bulletin des lois;*

(3) The expense of enumerating the population, of the electoral assemblies which are held in the communes and of electoral tickets;

(4) The expense of civil registers and of books of registry (*livrets de famille*), and that part of the decennial table of civil acts (*actes de l'état civile*) which is at the expense of the communes;

* The *Bulletin des communes* is no longer published, but it is replaced by the *Journal officiel, édition des communes.*

(5) The salary of the municipal receiver, and of the overseer-in-chief of the octroi;

(6) The salaries and other expenses of the municipal and rural police and of the keepers of the forests of the commune;

(7) The pensions at the expense of the commune, when they have been regularly liquidated and approved;

(8) The expense of rent and repairs of the apartments of the justice of the peace, as well as that of the purchase and maintenance of his movables in the communes which are the chief towns of the cantons;

(9) The expense of public instruction, in conformity with law;

(10) The quota of the expense of assisted children and of lunatics assigned to the commune in conformity with law;

(11) Payment for the lodgings of vicars, curates, and other ministers of public worship salaried by the State, when there is no building set apart for their residence, and when the vestry boards or other managing boards of the religious bodies are not able themselves to provide for the payment of this expense;

(12) Heavy repairs of communal buildings, with the exception, when they are dedicated to worship, of the previous application of revenues and resources which may be expended by the vestry boards for these repairs, and subject to the execution of special laws concerning buildings devoted to military service.

If there is disagreement between the vestry-board and the commune, when the financial assistance of the latter is asked by the vestry-board in the cases provided for in paragraphs 11 and 12, it is decided by decree upon the statements of the ministers of the interior and the ministers of worship;

(13) The closure of cemeteries, their maintenance and their removal in the cases determined by the laws and regulations of public administration;

(14) The expense of preparing and preserving the plans of laying out and leveling streets;

(15) The expense of the councils of prud'hommes, for the communes comprised within the territory of their jurisdiction, in proportion to the number of electors registered on the special electoral lists at their election; the inconsiderable expense of consulting chambers of arts and manufactures for the communes where they exist;

(16) The assessments and taxes established by law on the communal property and revenues;

(17) The payment of exigible debts;

(18) The expenses of the local roads (*chemins vicinaux*), within the limits fixed by law;

(19) In the colonies governed by this law, the salaries of the secretary and employees of the mayoralty; the taxes assessed on the communal property; the expenses for the service of the militia which are not at the expense of the treasury;

(20) The expenses occasioned by the application of Art. 85 of this law, and in general all the expenses assigned to the communes by provision of law.

ART. 137. The establishment of octroi taxes voted by the municipal council, and the regulations relative to their collection, are authorized by decree of the President of the Republic in the Council of State, with the advice of the council general or of the departmental commission in the interval between the sessions.

ART. 140. The various taxes due from the inhabitants or proprietors by virtue of laws and local usages are levied by vote of the municipal council approved by the prefect.

These taxes are collected according to the forms established for the collection of public taxes.

ART. 141. Municipal councils may vote, within the limit of the maximum fixed each year by the council-general, extraordinary contributions not exceeding five *centimes* for five years, to apply the proceeds to extraordinary expenses of communal utility.

They may also vote three *centimes extraordinaires* to be applied exclusively to the ordinary local roads (*chemins vicinaux*), and three *centimes extraordinaires* to be applied exclusively to recognized country roads (*chemins ruraux*).

They vote and regulate the communal loans payable from the *centimes extraordinaires* voted as provided in the first paragraph of this article, or from the ordinary resources, when the liquidation, in this latter case, is within thirty years.

ART. 142. The municipal councils vote, subject to the approval of the prefect:

(1) Extraordinary contributions which exceed five centimes, without exceeding the maximum fixed by the council-general, the duration of which, exceeding five years, is not more than thirty years;

(2) Loans payable from the same extraordinary contributions or from the ordinary revenues in a period exceeding, in this latter case, thirty years.

ART. 143. Any extraordinary contribution exceeding the maximum fixed by the council-general, and any loan payable, from such a contribution, is authorized by decree of the President of the Republic.

If the contribution is established for a period of more than thirty years, or if the loan payable from extraordinary resources is to exceed that period, the decree is made in the Council of State.

It is decided by a law if the amount of the loan exceeds a million [francs], or if, added to the amount of other loans not yet paid, it exceeds a million [francs].

ART. 144. The forests and woods of the State pay the ordinary and extraordinary *centimes additionels* devoted to the expenses of the communes in the same proportion as private property.

### SECTION II.— VOTE AND REGULATION OF THE BUDGET.

ART. 145. The budget of each commune is proposed by the mayor, voted by the municipal council, and approved by the prefect.

When it provides for all the necessary expenses, when no extraordinary receipts are applied to the expenditures either obligatory or optional, ordinary or extraordinary, the allowances contained in the said budget for optional expenditures cannot be modified by the superior authority.

The budget of a city whose revenues are at least three million francs is always submitted to the approval of the President of the Republic, on the proposition of the Minister of the Interior.

ART. 146. The credits which are recognized as necessary after the authentication of the budget are voted and authorized in conformity with the preceding article.

ART. 147. The municipal councils may insert in the budget a sum for unforeseen expenses.

The sum allowed for this purpose cannot be reduced or rejected excepting so far as the ordinary revenues, after having satisfied all the obligatory expenditures, will not permit it to be met.

ART. 148. The decree of the President of the Republic or the order of the prefect which approves the budget of the commune may reject or reduce the expenditures allowed therein, except in the cases provided for by section 2 of Art. 145 and section 2 of Art. 147; but it cannot increase them or introduce new expenditures except so far as they are obligatory.

### CHAPTER IV.—THE ACCOUNTABILITY OF THE COMMUNE.

ART. 152. The mayor alone may issue warrants.

If he refuses to order the payment of an expenditure regularly authorized, it will be ordered by the prefect in the council of the prefecture, and the order of the prefect will take the place of the warrant of the mayor.

ART. 157. The accounts of the municipal receiver are audited by the council of the prefecture subject to the appeal to Court of Accounts, for the communes whose ordinary revenues, in the last three years, do not exceed thirty thousand francs.

They are audited and finally approved by the Court of Accounts for the communes whose revenue is greater.

These distinctions are applicable to the accounts of the treasurers of hospitals and other benevolent establishments.

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